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FOR INCLUSION IN THE ADMINISTRATIVE RECORD

September 4, 2013

Mike R. Rafati, Enforcement Specialist
U.S. Environmental Protection Agency, Region 5
Superfund Division
Enforcement & Compliance Assurance Branch
Enforcement Services Section 2, SE-5J
77 West Jackson Boulevard
Chicago, IL 60604-3590

Re: Inverse Investment Site, Trust Number 13439
McHenry, McHenry County, IL 60050
Site Spill Identification Number: C5T7
Response to the General Notice of Potential Liability

Dear Mr. Rafati:

This letter is submitted on behalf of Inverse Investments, LLC ("Inverse") in response to the U.S. EPA's General Notice Letter dated August 22, 2013 for the Inverse Investment Site, located at 3004 West Elm Street in McHenry, IL (the "Site"). As the response date is September 5, 2013, this response is timely submitted. By submitting this response letter, Inverse does not admit, and specifically denies, any claim that it disposed of or released any materials or hazardous substances at the Site.

We were rather confused upon receipt of your letter because Inverse has been diligently responding to the hazardous substances in the soil and groundwater at the Site through the Illinois Site Remediation Program ("SRP"). The SRP is the voluntary cleanup program created by Title XVII of the Illinois Environmental Protection Act, in which a party may conduct remedial activities at a site under the review and approval of the Illinois Environmental Protection Agency ("Illinois EPA"). 415 ILCS 5/58 *et seq.* Since inheriting the property in 2005, Inverse has conducted a thorough investigation and remediation of the soil and groundwater contamination at the Site.

This diligent effort to remediate the Site has cost Inverse considerable time and money and placed significant stress on the owners of Inverse. Since inheriting the Site, Inverse has spent approximately $200,000 for the Site investigation and remediation and conducted additional remedial activities above and beyond the requirements of the Illinois Environmental Protection Act and its regulations. Inverse is also defending an enforcement action brought by the State of Illinois in front of the Illinois Pollution Control Board, *People of the State of Illinois v. Inverse Investments, L.L.C.*, PCB 11-79. In fact, just before receipt of your General Notice Letter, Inverse was preparing to voluntarily resolve the State's single alleged violation of the Illinois Environmental Protection Act following the State's finding of an inability to pay.

Regarding the claims set forth in your letter, and as described in detail below, Inverse has no CERCLA liability because it fully qualifies for the innocent landowner defense under Section 107(b)(3). 42 U.S.C. §107(b)(3). Inverse inherited the Site after the disposal of hazardous substances by a third party and thus does not have a "contractual relationship" with the third party as that term is defined in Section 101(35)(A)(iii) of CERCLA. 42 U.S.C. §101(35)(A)(iii). Since inheriting the Site, Inverse has exercised due care with respect to the hazardous substances by conducting an active remediation and has taken precautions against all foreseeable acts or omissions by any other third party.

Inverse is providing this information and response with the expectation that U.S.EPA will agree that Inverse has no liability at the Site for the alleged contamination. It is Inverse's goal to complete the remediation at the Site through the Illinois EPA SRP Program. Between the State and now U.S. EPA, Inverse is in an impossible position. If Inverse continues its work under the Illinois SRP, Inverse's actions may conflict with work U.S. EPA intends to perform as stated in the General Notice Letter. Further, Inverse could find itself having to defend a U.S. EPA cost recovery claim for actions taken by U.S. EPA when Inverse was already performing the SRP actions.

Inverse does not intend to conduct the actions listed in your General Notice Letter given its ongoing work under the SRP. Inverse requests that U.S. EPA withdraw the General Notice Letter as it relates to the Site and allow Inverse to continue under the Illinois SRP, consistent with U.S. EPA policy. (Superfund MOU Addendum No. 1, April 6, 1995).

A. Brief Statement of Facts

For a short period of time in the early to mid 1970s, a former owner of the Site leased it to a dry cleaner. This is the only period in which the hazardous substances found at the Site were released. The Site was placed into a land trust in the late 1990s. Approximately 12 years later, the trust's owner discovered that the dry cleaner's operations appeared to have caused contamination at the Site and enrolled the Site in the SRP. When the Site trust owner died in 2004, the Site was transferred to a trust for the benefit of the prior owner's wife. In 2005, Inverse inherited the property through the wife's estate. That same year, Inverse leased the Site to Enterprise Rent-A-Car, which only conducts car rental at the Site and does not conduct any auto repair or other repair work. Since inheriting the property, Inverse continued its participation in the SRP and has spent significant resources addressing the contaminants located on the Site.

B. Past Investigation and Remediation of the Site

In 2002 and 2003, the Green Environmental Group, Ltd. conducted a Phase I and Focused Site Investigation ("FSI") of the property on behalf of the previous owner. The FSI found volatile organic chemicals ("VOCs"), including perchloroethylene ("PCE"), in the soil and groundwater. Both documents were submitted to the Illinois EPA in September 2003 as a part of the application into the SRP. Illinois EPA accepted the property into the SRP in October 2003 and approved the Phase I and FSI in March 2004.

When Inverse inherited the Site in 2005, Inverse continued the prior owner's efforts to investigate and remediate the Site. In 2006, Inverse's consultant, Miller-Butler Environmental Consulting, LLC, completed a Supplemental Site Investigation ("SSI") to further investigate the horizontal and vertical extent of the VOCs in the soil and groundwater. (The SSI is attached as Exhibit A). In August 2006, Illinois EPA approved the SSI results and recommended that Inverse prepare a Remedial Objectives Report and Remedial Action Plan ("ROR/RAP"). Inverse's consultant, Northern Environmental Technologies, Inc. ("Northern Environmental"),[1] submitted the Remedial Objectives Report and Remedial Action Plan (ROR/RAP) to the SRP in February 2007. (The ROR/RAP is attached as Exhibit B). In accordance with Section 740 of the Illinois Pollution Control Board's ("Board") SRP regulations, the ROR/RAP evaluated the soil and groundwater contamination at the property and methods to remediate the property.

At the request of the Illinois EPA, Northern Environmental calculated the modeled extent of the contamination based upon the R26 Equation.[2] Northern Environmental used the groundwater sample results from the SSI, which were taken in 2005, the same year that Inverse inherited the trust/property. Using Equation R26 and the SSI groundwater concentrations, the ROR/RAP demonstrated that the maximum groundwater concentration for all contaminants of concern ("COCs") would fall below the Illinois Tier I Groundwater Ingestion Remediation Cleanup Objective for Class I Groundwater within 351 feet of the source area. (See Table 5 in the ROR/RAP). Further, the maximum distance the PCE could migrate in the groundwater was 77.6 feet from the source location. *Thus, from the time Inverse had control of the property and before any remedial activity, the maximum distance PCE at the property could travel was 77.6 feet and the maximum distance any COC could travel was 351 feet.*[3] These distances are notable because the range of any passive migration of the previously disposed hazardous substances is far shorter than the distance to any residential building potentially affected by hazardous substances in the groundwater.

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[1] The names of consulting companies have changed throughout the investigation of the Site due to various acquisitions; the consultant, Michael Butler, has remained on the project and participated in the site investigations, remediation, and monitoring since 2005.

[2] The R26 Model is the model authorized by the Board regulations to model all groundwater. 35 IAC 742, Appendix C, Table C.

[3] Also, at the Illinois EPA's request, Northern Environmental conducted an additional R26 calculation for the potential distance PCE traveled from the site based upon the proposed soil remediation objective of 240 ppm. That modeling showed that the furthest distance the PCE in the soil would travel in the groundwater off-site would be 18 feet. (The R26 calculation is in Attachment A of the July 16, 2007 response letter to IEPA, attached as Exhibit C).

In the ROR/RAP, Northern Environmental recommended bioremediation to address the COCs at the property. This recommendation was based upon site-specific needs, cost, time, effectiveness, safety, and the impact the remediation would have on operations at the property. The bioremediation was a series of injections of RegenOx and HRC, compounds designed to remediate the soils and groundwater impacted by VOCs. These two particular chemicals were selected because RegenOx is a fast-acting compound, and the HRC is a slow-release long-acting compound. By injecting them together, they would act in concert to remediate the contamination in the soil and groundwater. Northern Environmental also proposed Environmental Land Use Controls ("ELUCs") to restrict exposure to the soil and groundwater. Illinois EPA approved the RAP in August 2007.

In 2008, Northern Environmental began the bioremediation at the property. The bioremediation involved multiple injections of the RegenOx and HRC into the subsurface. Because the HRC is long-acting and effective for up to 18 months, Northern Environmental did not sample the groundwater until March 2009. From March 2009 until present, Inverse's consultant has conducted groundwater monitoring approximately tri-annually. (A summary of the groundwater analytical results is attached as Exhibit D). Further, as described below, Inverse intends to conduct additional investigation to confirm that the bioremediation was effective.

C. Inverse Is Not Liable as an Owner or Operator at the Site

Inverse is not a responsible party under CERCLA because it fully qualifies for the innocent landowner defense set forth in Section 107(b) of CERCLA. 42 U.S.C. 9607(b). Under Section 107(a) of CERCLA, an owner or operator of a Site is liable for removal and remedial activities of any hazardous substances disposed of at a Site. However, a person is not liable under Section 107(a) if the person establishes by a preponderance of the evidence that (1) the release of hazardous substances was caused solely by a third party; (2) the third party was not in a contractual relationship with the person; and (3) the person exercised due care with respect to the hazardous substances, and took precautions against foreseeable acts or omissions of other third parties. 42 U.S.C. §9607(b)(3); *see American Nat'l Bank & Trust Co. v. Harcros*, 997 F.Supp. 994 (N.D.Ill., 1998). "Contractual relationship" is defined in Section 101(35)(A) of CERCLA as any land contract, deed, or other instruments transferring property, *but excludes property acquired after the disposal of hazardous substances and in which the "defendant acquired the facility by inheritance or bequest."* 42 U.S.C. §9601(35)(A)(iii).

1. The Disposal Occurred Before Inverse Inherited the Property

It is well established "that beneficiaries [that] have not been involved in the activities which gave rise to the CERCLA liability by any method other than inheritance are not subject to liability under the statute." *Illinois v. Grigoleit Co.,* 104 F.Supp.2d 967, 982 (C.D.Ill. 2000) (*citing Norfolk S. Ry. Co. v. Shulimson Bros. Co.*, 1 F.Supp.2d 553, 556 (W.D.N.C. 1998)); *see also, Chesapeake & Potomac Tel. Co. v. Peck Iron & Metal Co.*, 814 F.Supp. 1285, 1292 (E.D.Va. 1993) ("the explicit provision in CERCLA creating an 'innocent landowner defense' for parties who merely acquire contaminated property by inheritance demonstrates Congress'

intent that a person should not be subjected to CERCLA liability merely because property has been inherited").

As stated above, the only disposal of hazardous substances at the Site occurred in the mid 1970's when a dry cleaner operated at the Site. When the first Site trust owner died in 2004, the Site was transferred to a trust for the benefit of the prior owner's wife. In 2005, upon the passing of the prior owner's wife, the trust that owned the Site was transferred to Inverse. In other words, Inverse inherited the property.[4] When Inverse inherited the Site in 2005, Inverse did not have any connection with the dry cleaner business. Under the plain language of CERCLA, because Inverse acquired the property via inheritance long after the disposal of hazardous substances, Inverse was not in a contractual relationship with the dry cleaners.

2. Inverse Has Exercised Due Care With Respect to the Hazardous Substances

After inheriting the Site, Inverse has exercised due care with respect to the hazardous substances at the Site and has taken precautions against foreseeable acts or omissions by third parties by continuing the investigation and remediation at the Site. Federal Courts have held that exercising due care and taking appropriate precautions under §107(b)(3) of CERCLA is established when a person takes all precautions that a similarly situated reasonable and prudent person would have taken. *New York v. Lashins Arcade Co.*, 91 F.3d 353, 361(2nd Cir. 1996) (new owner of property contaminated with PCE exercised due care because the owner maintained the water filter, took groundwater samples, and instructed tenants to not discharge any waste into the septic system). The person must show that he took precautions to prevent the threat of release or other foreseeable consequences arising from the pollution of the site. *Kerr-McGee Chemical Corp. v. Lefton Iron & Metal Co.*, 14 F.3d 321, 325 (7th Cir. 1994) (Court held that due care and taking precautions included attempting to remove the pollution or taking other steps to reduce the threat). That includes taking "positive steps" to reduce the threat posed by the contamination. *Id.* The positive steps must include not only monitoring the contamination but also removing the contamination. *City of Gary, Indiana v. Shafer*, 683 F.Supp.2d 836, 859 (N.D. Ind. 2010); *American Nat'l Bank & Trust Co. v. Harcros*, 997 F.Supp. 994, 1002 (N.D. Ill. 1998).

The investigation and remediation at the Site clearly shows that Inverse has more than sufficiently exercised due care and taken all appropriate precautions as those terms are defined by the Federal Courts. Upon inheriting the Site, Inverse has taken all the precautions that a similarly situated reasonable and prudent person would have taken by continuing the investigation and remediation at the Site. Inverse has also ensured that no pollutants or contaminants of concern have been disposed, stored, discharged, released or in any way associated with the property. Inverse has taken "positive steps" to reduce the threat posed by the hazardous substances by thoroughly investigating the soil and groundwater at the Site and injecting bioremediating chemicals to remove the hazardous substances in the soil. Inverse has conducted these remedial activities under the review and approval of the Illinois EPA. Inverse has repeatedly stated to Illinois EPA that it intends to complete the investigation and remediation

[4] Incidentally, Inverse's inheritance was the second inheritance transfer. The prior owner's wife also inherited the property and would have also qualified for the innocent landowner defense.

of the Site through the SRP. All of these investigatory and remedial actions show that Inverse has exercised due care with respect to the hazardous substances concerned and taken precautions for any foreseeable act or omission of any other third party.

Inverse squarely falls within the innocent landowner defense under Section 107(b)(3) of CERCLA. 42 U.S.C. 9607(b)(3). A third party, the dry cleaners operating 40 years ago, was the sole cause of the disposal of hazardous substances. Inverse did not have a "contractual relationship" with the third party because it inherited the property long after the disposal of hazardous substances. 42 U.S.C. 9601(35)(A)(iii). Since inheriting the property, Inverse has continued the investigation and remediation of the Site begun by the prior owners. These diligent efforts are all positive steps which show that Inverse has exercised due care in response to the hazardous substances and taken all precautions against any foreseeable acts or omissions of third parties to foreclose any threat of further release. Thus, Inverse is not liable under CERCLA for the hazardous substances at the Site.

D. Proposed Future Remediation at the Site

As stated above, until receipt of the State's enforcement and now U.S. EPA's Notice Letter, Inverse has been conducting and planned to continue any Site remediation pursuant to the Illinois EPA SRP regulations. 35 Ill. Adm. Code 740 and 35 Ill. Adm. Code 742. In accordance with the SRP, remedial action would involve:

1) remediation of the soil and groundwater contamination at the Site through the Illinois Environmental Protection Agency's ("Illinois EPA") Site Remediation Program in accordance with 35 Ill. Adm. Code Part 740;
2) compliance with the Illinois Tiered Approach to Corrective Action Objectives ("TACO") for Industrial/Commercial Property, 35 Ill. Adm. Code 742, including the indoor inhalation pathway requirements;
3) additional sampling at the Site to demonstrate the efficacy of the bio-remediation work;
4) updated R26 calculation in accordance with 35 Ill. Adm. Code 742 Appendix C, Table C to model the projected extent of groundwater contamination;
5) submitting a list of properties at which Environmental Land Use Controls ("ELUCs") may be required pursuant to 35 Ill. Adm. Code 1010;
6) submitting a Remedial Action Completion Report pursuant to 35 Ill. Adm. Code 740.455.

The above described remedial activities are established by the Illinois voluntary regulatory scheme to remediate historical releases and are protective of human health and the environment. In fact, in a 1995 Memorandum of Understanding ("MOU"), Region 5 found that the Illinois EPA Pre-Notice Site Cleanup Program ("PNSCP"), the precursor of the SRP, established a consistent cleanup objectives process that is protective of human health and environment. (Superfund MOU Addendum No. 1, April 6, 1995). As U.S.EPA has found that the Illinois EPA cleanup objectives process in the SRP is protective of human health and the

environment, U.S.EPA should allow Inverse to continue in the State program and complete the remediation activities it intends to conduct.

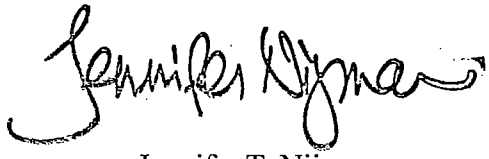
E. Conclusion

Since inheriting the Site, Inverse has spent significant amounts of time and money to complete the investigation and remediation at the Site. Despite Inverse's best efforts and its clear designation as an innocent landowner who did not cause or allow any disposal of any hazardous substances, Inverse has been subjected to unwarranted enforcement action by the State. Recently, the State agreed Inverse is unable to pay any significant penalty and at the same time, referred the case to U.S. EPA. We understand that the State did not provide U.S. EPA with any of the facts or history surrounding the Site. Inverse is an innocent landowner which inherited the Site and has continued the investigation and remediation upon its inheritance. As can be seen by the investigations conducted at the Site and following the U.S.EPA approved cleanup objectives process, any hazardous substances at the Site at the time of Inverse's inheritance (2005) could only have migrated a short distance off site. Based upon the above information, Inverse fully qualifies for the innocent landowner defense under Section 107(b)(3) of CERCLA and has no CERCLA liability at the Site.

It is Inverse's intention and goal to complete the remediation at the Site and acquire an NFR letter pursuant to the SRP. We request that U.S.EPA withdraw its Notice Letter as it relates to the Site and allow Inverse to complete its SRP work, consistent with U.S.EPA's Superfund MOU. At the very least, Inverse would like to better understand how U.S. EPA intends to proceed at the Site so that Inverse can respond appropriately.

Please contact me if you have any further questions.

Sincerely,



Jennifer T. Nijman

Enclosures

A

EXHIBIT A

Miller-Butler Environmental Consulting, LLC
Supplemental Site Investigation Report
March 1, 2006

miller-butler
ENVIRONMENTAL CONSULTING, LLC.

SUPPLEMENTAL SITE INVESTIGATION REPORT

3004 WEST ELM STREET
MCHENRY, ILLINOIS
LPC#1110605163

March 1, 2006

11214 Route 47, Suite D
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APPENDICES

I. EXECUTIVE SUMMARY

Inverse Investments, LLC. (Inverse Investments) retained Miller-Butler Environmental Consulting, LLC. (Miller-Butler Environmental) to complete site investigation, data evaluation and subsequent IEPA reporting for the property located at 3004 West Elm, McHenry, Illinois (the Site).

The Site is approximately 0.3 acres in size and is improved with a brick-and-block building, which encompasses approximately 0.11 acres of the Site. The remainder of the Site is asphalt paved surrounding the building.

Six additional boreholes (two completed as monitoring wells) were advanced at the Site to further investigate the horizontal and vertical extent of impact from volatile organic compounds (VOCs) in soil and groundwater. The following conclusions are based on the site investigation and subsequent evaluation presented in this report:

- VOC contamination in soil appears to be present at concentrations exceeding Tier 1 SROs for inhalation and ingestion in the area encompassing BH-17 and BH-16. Tier 1 SROS for Class I groundwater have also been exceeded in soils across the western and northwestern portions of the Site.
- VOC contamination in groundwater appears to be present at concentrations exceeding Tier 1 GROs for Class I groundwater in all on-site monitoring wells with the exception of monitoring well MW-1.

Miller-Butler Environmental has prepared this Supplemental Site Investigation Report (Report) to document the additional investigation activities completed at the Site. Miller-Butler Environmental believes that delineation of contaminants in soil and groundwater has been completed, and upon approval of this Report by the Illinois Environmental Protection Agency (EPA), will proceed with the preparation of a Remedial Action Plan (RAP).

II. SITE DESCRIPTION

A. Site Description and Location

The property located at 3004 West Elm, McHenry, Illinois (the Site) is approximately 0.30 acres in size and is improved with a one-story brick-and-block building. The building encompasses approximately 0.11-acres of the Site. The Site is asphalt paved surrounding the building.

The building on the Site is currently vacant but was most recently used as a tire store. Previously, the Site was occupied by an automotive repair shop and a drycleaners. The building is currently being remodeled for use as a rental car facility.

The Site is located in a mixed-use commercial, residential, and recreational area. The Site is bordered to the north by a VFW Park, to the east and west by commercial properties, and to the south by Elm Street. Beyond Elm Street to the south are commercial properties, followed by residential properties located approximately 500 feet to the south.

The Site location and local topography are shown on **Figure 1**. A Remediation Site base map, which meets the requirements of Title 35 Illinois Administrative Code (IAC) Section 740.210(a)(7), is included as **Figure 2**.

B. Legal Description

The Legal Description for the Site is as follows:

LOT 13 AND THE WESTERLY 20 FEET OF LOT 14 IN CONWAY'S SUBDIVISION, A SUBDIVISION OF PART OF THE WEST HALF OF THE SOUTHWEST QUARTER OF SECTION 25, TOWNSHIP 45 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 16, 1923, AS DOCUMENT NO. 60194, IN BOOK 4 OF PLATS, PAGE 99, IN MCHENRY COUNTY, ILLINOIS.

C. Area Geology / Hydrogeology

The Illinois State Geological Survey (ISGS) Circular, entitled "Potential for Contamination of Shallow Aquifers in Illinois", commonly known as the Berg Circular, was referenced to accurately locate the Site in relation to the regional subsurface soil formations that are believed to exist in the general vicinity of the Site. The Site appears to be in an "A2" designated area, which the Berg Circular describes as "Thick permeable sand and gravel, within 20 feet of surface."

During the site investigation activities conducted by The Green Environmental Group, Ltd. (Green) in August, September, and December 2002, and by Miller-Butler Environmental in November 2005, native clay with varying amounts of sand was encountered to a depth of approximately 15 feet below grade (fbg) across the Site. Native brown and gray sand was typically encountered from 15

fbg to the borehole termination depths (a maximum of 44 fbg).

The ground surface at the Site appears to be asphalt on grade. Visual observation of the topography indicates that run-off on the Site tends to flow to storm sewer drains located along West Elm Street.

Soil saturation conditions were observed in the boreholes conducted between 8.5 and 11 fbg. Measured groundwater depths in the groundwater monitoring wells at the site on February 17, 2006 ranged from 6.75 to 9.1 feet fbg, with an average depth to groundwater of 7.61 fbg. Based on the groundwater depth measurements, groundwater flow at the Site appears to be to the southwest.

Soil boring and monitoring well logs from the investigation conducted by Miller-Butler Environmental in November 2005 are provided in **Appendix A.** Depth to groundwater measurements are summarized in **Table 3.** Groundwater elevations and groundwater flow direction are shown on **Figure 5.**

As presented in the original Focused Site Investigation Report dated October 3, 2003, prepared by Green, the hydraulic conductivity (K) at the Site has been determined to be approximately 1.4×10^{-3} centimeters per second (cm/s). Additionally, the Groundwater at the Site has been classified as Class I Potable Resource Groundwater based on the geological and hydrogeological characteristics of the Site.

D. Current and Post-Remediation Use of the Site

The Site is developed for commercial use and is occupied by a vacant commercial building. The building at the Site is currently being remodeled for use as a car rental facility. Following issuance of a Focused NFR letter, the Site is expected to continue to be used for similar purposes.

III. ENFORCEMENT OR RESPONSE ACTIONS

A. Environmental Enforcement Actions

No recorded enforcement actions have been taken at the Site prior to this Site Investigation. There are also no known enforcement actions taken at properties immediately adjacent to the Site.

B. Response Actions

No recorded response actions have been taken by local, State, federal or private parties at the Site prior to this Site Investigation. There are also no known response actions taken at properties immediately adjacent to the Site.

C. Previous Studies

The following previous studies were completed at the Site, based on the information provided in the Focused Site Investigation Report prepared by Green:

- August 28, 2002: Green completed an investigation consisting of three soil borings (BH-1 through BH-3) at the Site.
- September 19 and 23, 2002: Green completed an investigation consisting of six soil borings (BH-4 through BH-9) at the Site.
- October 9, 2002: Green completed an investigation consisting of the installation of three monitoring wells (MW-1 through MW-3) at the Site.
- October 17, 2002: Green completed groundwater monitoring and sampling at the Site.
- December 12 and 17, 2002: Green completed an investigation consisting of five soil borings (BH-10 through BH-14) and two monitoring wells (MW-4 and MW-5) at the Site.
- January 16, 2003: Green conducted groundwater monitoring and sampling activities on monitoring wells MW-4 and MW-5 at the Site.
- October 2, 2003: Green submitted a Focused Site Investigation Report (SIR) to the Illinois EPA.
- December 18, 2003: Illinois EPA issued a response to the SIR, requesting that additional soil and groundwater investigation be conducted.
- January 21, 2004: Green submitted a response to the Illinois EPA's December 2003 letter, proposing the additional soil and groundwater investigation, and promising additional information to be provided in an addendum report.
- March 24, 2004: Illinois EPA issued a response to Green's January 2004 letter, providing more detailed instructions for the locations and depths of the proposed soil borings and monitoring wells.
- July 29, 2005: Miller-Butler Environmental submitted a detailed Site Investigation Plan to the Illinois EPA.
- October 25, 2005: Illinois EPA issued a response to the Site Investigation Plan, approving it with an additional request to sample all site monitoring wells.

IV. SITE-SPECIFIC SAMPLING PLAN

Miller-Butler Environmental investigated the nature and extent of residual VOCs detected in subsurface soils and groundwater at the Site, as proposed in the Workplan which was submitted to the Illinois Environmental Protection Agency (EPA) on July 29, 2005, and approved by the Illinois EPA with modifications in a letter dated October 25, 2005. A copy of the Illinois EPA's October 25, 2005 letter is provided in **Appendix B**. The methods used to investigate impacted soil and groundwater are briefly described below.

The following sampling plan was implemented in order to meet IEPA site investigation requirements, minimize cost and disruption of business, and expedite project completion. The purpose of this Site Investigation was to determine the full nature and extent of subsurface soil and groundwater impact at the Site. The IEPA's soil and groundwater sampling guidelines and applicable state laws were followed throughout the course of the site investigation. The site investigation was also intended to determine the nature, concentration, direction and rate of movement of contaminants at the Site, as well as the significant physical features of the Site and vicinity that may affect contaminant fate and transport and risk to human health, safety and the environment.

V. DOCUMENTATON OF FIELD ACTIVITIES

A. Field Investigation

Soil

On November 16 and 17, 2005, six soil boreholes (BH-15 through BH-20) were advanced and sampled using a Geoprobe drill rig and hollow-stem auger drill rig, operated by Drilling Unlimited. The boreholes were advanced at the Site to determine the horizontal and vertical extent of impact to subsurface soils, and to determine the subsurface geology.

The Site layout and borehole locations are illustrated on **Figure 3**.

Groundwater

On November 17, 2005, soil boreholes BH-17 and BH-20 were advanced and completed using a hollow-stem auger drill rig, operated by Drilling Unlimited. Monitoring wells MW-6 and MW-7 were installed at the Site in locations intended to determine the horizontal and vertical extent of impact to groundwater beneath the Site.

The Site layout and monitoring well locations are illustrated on **Figure 3**.

B. Quality Assurance

A Miller-Butler Environmental scientist maintained a borehole log, field-screened samples, and collected soil samples for laboratory analysis. No lubricants or solvents were used on any downhole drilling or sampling equipment. Sampling tools and equipment were washed with a mild detergent solution and double rinsed with deionized water before each use. Samples were collected, preserved and submitted for analysis to an Illinois-accredited laboratory to confirm the results of field screening in accordance with SW 846 Method 5035.

Samples collected from each sampled interval were also subjected to headspace analysis for VOCs using a photoionization detector (PID). The headspace analysis sample was sealed in a 1-quart plastic resealable bag. Care was taken to maintain a relatively constant soil volume-to-headspace volume ratio for all samples. The sealed headspace sample was agitated to break up soil clods before being left in a warm environment for at least 10 minutes to allow volatilization to occur. The plastic resealable bags were then carefully punctured with the PID probe and the highest stable response occurring in 10 to 20 seconds was recorded.

Five grams of sample designated for laboratory analysis was measured with a laboratory-supplied syringe. Five grams of the sample were inserted into each of three 40-milliliter glass vials, one preserved with 5-milliliters (mL) of sodium bisulfide and two preserved with 5-mL of methanol,

and sealed with a Teflon-line threaded cap. One 4-ounce jar of the sample was collected for dry weight analysis at the laboratory. All sample containers were labeled and stored on ice in a cooler. The samples were preserved on ice and shipped via FedEx to Environmental Science Corp. (Environmental Science), Mt. Juliet, Tennessee under chain-of-custody documentation to verify sample preparation and handling. Samples were submitted for VOC analysis by SW 846 Method 8260.

Soil boring and monitoring well logs documenting drilling and sampling intervals, soil descriptions, PID readings, and well construction details are included in **Appendix A.** Laboratory Reports are included in **Appendix C.**

VI. ENDANGERMENT ASSESSMENT

A. Water-Supply Well Survey Results

An investigation was conducted by Green and documented in the SIR dated October 2, 2003, in order to identify and document all registered community water wells within a 2,500-foot radius of the Site and all potable wells within a 1,000-foot radius. The results of this well search were provided in the original SIR submitted by Green. Numerous potable wells were determined to be located within 1,000-feet of the Site. The nearest down-gradient wells are located approximately 495 feet south-southwest of the Site. Additionally, based on information provided by the City of McHenry, the park located to the north of the Site has opted not to use the City water supply, and City water is not available to the south of Elm Street. The well search is provided in the original SIR.

Class III Special Resource Groundwater is present in McHenry County, at Parker Fen. Parker Fen is located more than 5 miles from the Site, therefore the Class III Special Resource Groundwater is not within a 200-foot radius of the Site (IEPA, 2002). No surface bodies of water are on site or within a 200-foot radius of the Site.

B. Extent of Contaminants of Concern in Soil

Soil sample laboratory results are summarized in **Table 1**. The extent of VOC contamination in soil is identified in **Figure 3**. Tetrachloroethene (PCE) was detected at concentrations exceeding Tier 1 Soil Remediation Objectives (SROs) for inhalation and ingestion in an area encompassing boreholes BH-17 and BH-16. Trichloroethene (TCE) was detected at concentrations exceeding Tier 1 SROs for inhalation in the same area encompassing boreholes BH-17 and BH-16. Cis-1,2-Dichloroethene (DCE), PERC, and TCE were also detected at concentrations exceeding Tier 1 SROs for Migration to Class I Groundwater across the western and northwestern portions of the Site. Boreholes were advanced in locations at the Site to adequately characterize the extent of the contamination present on-site.

C. Extent of Contaminants of Concern in Groundwater

Groundwater sample laboratory results are summarized in **Table 2**. The extent of VOC contamination in groundwater is identified in **Figure 4**. DCE and PCE compounds were detected at concentrations exceeding Tier 1 Groundwater Remediation Objectives (GROs) for Class I Groundwater in monitoring wells MW-3, MW-4, and MW-5. TCE was detected at concentrations exceeding Tier 1 GROs for Class I Groundwater in monitoring wells MW-3, MW-4, MW-5, MW-6, and MW-7. Vinyl Chloride (VC) was detected at concentrations exceeding Tier 1 GROs for Class I groundwater in monitoring wells MW-3 and MW-4. Tier 1 GROs for Class II groundwater were also exceeded for these compounds in the named monitoring wells with the exception of VC in

monitoring well MW-3. Monitoring wells were advanced in locations at the Site to adequately characterize the extent of the contamination present on-site.

D. Contaminant Source and Migration Pathways

Based on information provided in the Phase I Environmental Site Assessment, which was part of the SIR prepared by Green, the Site was utilized as a drycleaner from approximately 1970 to 1977. Contaminants detected in soil and groundwater samples collected from the Site are consistent with releases of chlorinated solvents during the use of the Site as a drycleaner. No petroleum-based contaminants that would be associated with the use of the Site as an auto repair facility have been detected above Tier 1 SROs.

Floor drains are located within the building, which at one time discharge to the former septic field which was located in the northern portion of the Site. The discharge piping may have provided a pathway for the VOCs to travel from the interior of the building (suspected drycleaning areas) north to the area of borehole BH-3.

The Fox River is located approximately 1,100 miles west of the Site. Migration of contaminants from the Site to the Fox River is unlikely, given the distance. The Site is serviced by the municipal water supply, however, numerous potable wells are located in the vicinity of the Site, as described in Section VI.A above.

X. CONCLUSIONS AND RECOMMENDATIONS

Miller-Butler Environmental conducted a site investigation at 3004 W. Elm Street, McHenry, Illinois (the Site). A total of six boreholes, two completed as monitoring wells, were advanced at the Site to investigate the horizontal and vertical extent of impact from VOCs to the soil and groundwater beneath the Site. The following conclusions are based on the site investigation and subsequent evaluation presented in this report:

- VOC contamination in soil appears to be present at concentrations exceeding Tier 1 SROs for inhalation and ingestion in the area encompassing BH-17 and BH-16. Tier 1 SROS for Class I groundwater have also been exceeded in soils across the western and northwestern portions of the Site.
- VOC contamination in groundwater appears to be present at concentrations exceeding Tier 1 GROs for Class I groundwater in all on-site monitoring wells with the exception of monitoring well MW-1.
- The extents of soil and groundwater impact have been adequately investigated and defined within the physical boundaries of the Site. Therefore, Miller-Butler Environmental proposes the preparation of a Remedial Action Plan (RAP) for the Site.

The site investigation conducted by Miller-Butler Environmental, as well as the conclusions drawn and recommendations proposed, are based upon interpretation of the information available to Miller-Butler Environmental at the time of these activities. Miller-Butler Environmental assumes that the information provided by cited references is complete and correct. Miller-Butler Environmental believes that this report, remedial investigative work conducted, conclusions, and recommendations are consistent with Title 35 IAC.

Prepared By:

Michael C. Butler, P.E.
Principal

Kim T. Miller, P.E.
Principal

XI. REFERENCES

American Society for Testing and Materials, *Standard Practice for Soil Investigation and Sampling by Auger Borings*, Designation D-1452, 1990.

American Society for Testing and Materials, *Standard Method for Penetration Test and Split-Barrel Sampling of Soils*, Designation D-1586, 1992.

American Society for Testing and Materials, *Standard Practice for Description and Identification of Soil*, Designation D-2488, December 1993.

Fetter, C.W., "Applied Hydrogeology," Third Edition, 1994.

Illinois Environmental Protection Agency, "Groundwater Quality", *Illinois Administrative Code*, Part 620.

Illinois Environmental Protection Agency, "Site Remediation Program", *Illinois Administrative Code*, Part 740.

Illinois Environmental Protection Agency, "Source Water Assessment Program," http://il.water.usgs.gov/factsheets/, January 15, 2004.

Illinois Environmental Protection Agency, "Tiered Approached to Corrective Action Objectives", *Illinois Administrative Code*, Part 742.

Illinois State Geological Survey, *"Potential for Contamination of Shallow Aquifers in Illinois,"* Berg Circular 532, 1984.

Illinois Water Well Construction Code, Title 77, Part 920.

National Geographic, "Seamless USGS Topographic Maps on CD-ROM," National Geographic Holdings, Inc. 2001.

FIGURES

TABLES

Table 1
Soil Analytical Results - Detected VOCs

3004 West Elm, McHenry, IL

Compounds of Concern									
TIER 1 INDUSTRIAL/COMMERCIAL SOIL REMEDIATION OBJECTIVES			Acetone (mg/kg)	Benzene (mg/kg)	Carbon Disulfide (mg/kg)	cis-1,2-Dichloroethene (mg/kg)	Ethylbenzene (mg/kg)	Tetrachloroethene (mg/kg)	Trichloroethene (mg/kg)	Total Xylenes (mg/kg)
Mig. to Class I Groundwater			16	0.03	32	**0.4**	13	**0.06**	**0.06**	150
Mig. to Class II Groundwater			16	0.17	160	**1.1**	19	**0.3**	**0.3**	150
Soil Inhalation			100000	1.6	720	1200	400	**20**	**8.9**	320
Soil Inhalation (CW)			100000	2.2	9	1200	58	**28**	**12**	320
Soil Ingestion			200000	100	200000	20000	200000	**110**	520	1000000
Sample Location	Sample Date	Sample Depth								
BH-15	11/16/2005	2'	0.062	0.0015	0.0015	0.0078	0.0012	**0.14**	0.031	0.0038
BH-16	11/16/2005	12'	<160	<6.5	<6.5	<6.5	<6.5	**560**	**24**	<19
BH-17	11/16/2005	12'	<12	<0.48	<0.48	**2.4**	<0.48	**350**	**11**	<1.4
BH-17	11/16/2005	3'	0.52	<0.0011	<0.0011	<0.0011	<0.0011	0.0052	<0.0011	<0.0034
BH-17	11/16/2005	44'	0.22	<0.0011	<0.0011	<0.0011	<0.0011	0.014	<0.0011	<0.0034
BH-18	11/16/2005	17'	<0.028	0.0011	<0.0011	0.0067	<0.0011	**0.37**	0.029	<0.0034
BH-19	11/16/2005	12'	7.2	<0.040	<0.040	**3.7**	<0.040	**0.2**	**0.66**	<0.12
BH-20	11/16/2005	14'	0.38	<0.0012	<0.0012	<0.0012	<0.0012	0.0017	<0.0012	<0.0036

Notes:
1) mg/kg = milligrams per kilogram
2) SRO = Soil Remediation Objective
3) Bold = Analytical result exceeds the most restrictive Tier 1 SRO
4) BDL or <0.002 = Concentration was not detected above the laboratory detection limit
5) N = No toxicity criteria is available for the route of exposure
6) NA = SRO not listed in 35 IAC Part 742
7) CW = Construction Worker

Table 2
Groundwater Analytical Results - Detected VOCs

3004 West Elm, McHenry, IL

		Compounds of Concern			
TIER 1 GROUNDWATER REMEDIATION OBJECTIVES		cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl chloride
Class I Groundwater		**0.07**	**0.005**	**0.005**	**0.002**
Class II Groundwater		**0.2**	**0.025**	**0.025**	**0.01**
Monitoring Well ID	Sample Date				
MW-1	1/20/2006	<0.0010	<0.0010	<0.0010	<0.0010
MW-3	1/20/2006	**0.61**	**3**	**0.61**	**0.0076**
MW-4	1/20/2006	**8**	**<0.25**	**<0.25**	**3.4**
MW-5	1/20/2006	**1.7**	**15**	**2.6**	<0.025
MW-6	1/20/2006	0.023	0.002	**0.011**	<0.0010
MW-7	1/20/2006	0.01	0.011	**0.25**	<0.0010

Notes:
1) mg/kg = milligrams per kilogram
2) GRO = Groundwater Remediation Objective
3) Bold = Analytical result exceeds the bolded Tier 1 GRO
4) BDL or <0.002 = Concentration was not detected above the laboratory detection limit
5) N = No toxicity criteria is available for the route of exposure
6) NA = SRO not listed in 35 IAC Part 742
7) CW = Construction Worker

Table 3
Groundwater Table Elevation Data

3004 West Elm, McHenry, IL

Well No.	Ground Surface Elevation	Riser Elevation	Date	Depth to Groundwater	Groundwater Elevation
MW-1	749.91	749.73	10/17/02	6.67	743.06
			2/17/06	6.75	742.98
MW-2	750.42	749.94	10/17/02	7.13	742.81
			2/17/06	NA	NA
MW-3	750.14	749.84	10/17/02	6.80	743.04
			2/17/06	6.88	742.96
MW-4	750.27	749.93	1/16/03	7.68	742.25
			2/17/06	7.03	742.90
MW-5	750.27	749.84	1/16/03	8.00	741.84
			2/17/06	8.08	741.76
MW-6	750.38	749.79	-	-	-
			2/17/06	7.82	741.97
MW-7	750.46	749.79	-	-	-
			2/17/06	9.1	740.69

APPENDIX A

SOIL BORING AND MONITORING WELL LOGS

Miller-Butler Environmental Consulting, LLC Project No. 1015-0001-02	Boring Number: BH-15	Page: 1 of 1
Site Name: Inverse Inverstments Address: 3004 W. Elm Street McHenry, IL	Boring Location: north side of building	Date: 11/16/2005 Start 9:44am Finish 9:51am

Sample Number	Sample Device	Sample Recovery	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	OVA/PID/FID/OVM (ppm)	Remarks
			1	Concrete			
				Dark brown clay, some sand and gravel, dry, hard			
			2	Black clay, some sand, dry, hard		0.2	D = Dry M = Moist W = Wet
BH-15; 2'	DP	100%	3	Light brown clay, moist @ 4'			fbg = feet below grade
			4			0.2	
			5				DP= Direct Push
				End of boring at 5 feet below grade			NA = Not Applicable

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth NA	Rig Geoprobe	Illinois Environmental Protection Agency
▼ Depth While Drilling NA	Rotary Depth NA	Geologist Kim Miller	
▽ Depth After Drilling NA	Driller/Co. Drilling Unlimited		

Miller-Butler Environmental Consulting, LLC Project No. 1015-0001-02	Boring Number: BH-16	Page: 1 of 1	
Site Name: Inverse Inverstments Address: 3004 W. Elm Street McHenry, IL	Boring Location: interior, near MW-4/5	Date: 11/16/2005 Start 9:12am Finish 9:25am	

Sample Number	Sample Device	Sample Recovery	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	OVA/PID/FID/OVM (ppm)	Remarks
	DP	80%	1 2 3 4 5	Concrete Dark brown sandy clay, some moisture		0.4	D = Dry M = Moist W = Wet fbg = feet below grade DP= Direct Push NA = Not Applicable
		85%	6 7 8 9 10	Dark brown sandy clay, some moisture, wet and soft @ 8.5', saturated @ 10'		0.7	
BH-16; 12'		100%	11 12 13 14 15	Saturated light brown sandy clay, soft, 11.5-12' sand and gravel Saturated light brown sandy clay, soft, slight odor Gray, saturated, soft clay		41.2	
				End of boring at 15 feet below grade			

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data
▼ Depth While Drilling NA
▽ Depth After Drilling NA

Auger Depth NA Rig Geoprobe
Rotary Depth NA Geologist Kim Miller
Driller/Co. Drilling Unlimited

Illinois Environmental Protection Agency

The Agency is authorized to require this information under 415 ILCS 5/4 and 21. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $25,000.00 for each day the failure continues, a fine up to $50,000.00 and

Miller-Butler Environmental Consulting, LLC Project No. 1015-0001-02	Boring Number: BH-17	Page: 2 of 2
Site Name: Inverse Inverstments Address: 3004 W. Elm Street McHenry, IL	Boring Location: west of building	Date: 11/16-17/05 Start Finish

Sample Number	Sample Device	Sample Recovery	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	OVA/PID/FID/OVM (ppm)	Remarks
	HSA		22 23 24				D = Dry M = Moist W = Wet fbg = feet below grade DP= Direct Push NA = Not Applicable
		90%	25 26	Brown-gray, medium sand, wet		5.9	
			27				
		90%	28 29	Brown-gray, medium sand, wet		9.4	
		90%	30 31	Gray clayey sand with some gravel, wet		4.8	
			32 33 34				
		40%	35 36	Gray sandy clay, saturated		0.9	
			37 38 39				
		60%	40 41	Gray sandy clay, wet		3.7	
			42				
BH-17; 44'		40%	43 44	Gray medium sand, saturated		0.7	
			45 46	End of borehole at 44 feet below grade			

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data
▼ Depth While Drilling: NA
▽ Depth After Drilling: NA

Auger Depth: NA Rig: Geoprobe
Rotary Depth: NA Geologist: Kim Miller
Driller/Co.: Drilling Unlimited

Illinois Environmental Protection Agency

Miller-Butler Environmental Consulting, LLC Project No. 1015-0001-02	Boring Number: BH-17	Page: 1 of 2
Site Name: Inverse Inverstments Address: 3004 W. Elm Street McHenry, IL	Boring Location: west of building	Date: 11/16-17/2005 Start Finish

Sample Number	Sample Device	Sample Recovery	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	OVA/PID/FID/OVM (ppm)	Remarks
				Asphalt and gravel			
BH-17; 3'	DP	60%	1-5	Dark brown clay, trace sand and gravel, moist, plastic		0.4	D = Dry M = Moist W = Wet fbg = feet below grade
		60%	6-10	Brown clayey sand, moist to wet, gravel inclusions		0.7	DP= Direct Push NA = Not Applicable
BH-17; 12'		75%	11-15	Gray clay, odor, moist, stiff		60.3 21.0	
	HSA	60%	16-17	Brown medium sand, wet		4.2	
		10%	18-19	Brown-gray medium sand, wet			
		50%	20-21			11.7	

Continued on Page 2 of 2

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data
▼ Depth While Drilling NA
▽ Depth After Drilling NA

Auger Depth NA Rig Geoprobe
Rotary Depth NA Geologist Kim Miller
Driller/Co. Drilling Unlimited

Illinois Environmental Protection Agency

Miller-Butler Environmental Consulting, LLC	Boring Number: BH-18	Page: 1 of 1
Project No. 1015-0001-02		
Site Name: Inverse Inverstments	Boring Location: Northwest of building	Date: 11/16/2005
Address: 3004 W. Elm Street McHenry, IL		Start 9:52am
		Finish 10:35am

Sample Number	Sample Device	Sample Recovery	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	OVA/PID/FID/OVM (ppm)	Remarks
	DP	75%	1	Asphalt			D = Dry M = Moist W = Wet fbg = feet below grade DP= Direct Push NA = Not Applicable
			2	Sand and gravel fill			
			3	Light brown sand, dry			
			4	Brown clay, some sand, soft, moist		0.1	
			5				
		80%	6	Brown clay, some sand, soft, moist, saturated dark gray sand @ 8.5'			
			7				
			8			0.1	
			9	Light brown clay, dry to moist, hard			
			10				
		20%	11	Gray clay, moist, firm			
			12				
			13			0.7	
			14				
			15				
BH-18; 17'		100%	16	Brown-gray medium sand, wet to saturated			
			17				
			18			4.9	
			19				
			20				
				End of boring at 20'			

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth NA	Rig Geoprobe
▼ Depth While Drilling NA	Rotary Depth NA	Geologist Kim Miller
▽ Depth After Drilling NA	Driller/Co. Drilling Unlimited	

Illinois Environmental Protection Agency

The Agency is authorized to require this information under 415 ILCS 5/4 and 21. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $25,000.00 for each day the failure continues, a fine up to $50,000.00 and

Miller-Butler Environmental Consulting, LLC	Boring Number: BH-19	Page: 1 of 1
Project No. 1015-0001-02		
Site Name: Inverse Inverstments	Boring Location: western property line	Date: 11/16/2005
Address: 3004 W. Elm Street McHenry, IL		Start 11:15am
		Finish 11:55am

Sample Number	Sample Device	Sample Recovery	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	OVA/PID/FID/OVM (ppm)	Remarks
	DP	80%	1–5	Asphalt, fill Light brown clay, trace sand and gravel, moist, plastic		0.1	D = Dry M = Moist W = Wet fbg = feet below grade DP= Direct Push NA = Not Applicable
		90%	6–10	Light brown clay, trace sand and gravel, moist, plastic, black sand and gravel @ 6-6.5' Gray sand, some clay, wet Light brown clay, wet, firm		0.1	
BH-19; 12'		75%	11–15	Gray clay, moist, firm to soft		5.5	
		20%	16–20	Gray coarse sand, moist		4.0	
				End of boring at 20'			

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data	Auger Depth NA	Rig Geoprobe
▼ Depth While Drilling NA	Rotary Depth NA	Geologist Kim Miller
▽ Depth After Drilling NA	Driller/Co. Drilling Unlimited	

Illinois Environmental Protection Agency

Miller-Butler Environmental Consulting, LLC Project No. 1015-0001-02	Boring Number: BH-20	Page: 1 of 1
Site Name: Inverse Inverstments Address: 3004 W. Elm Street McHenry, IL	Boring Location: near southwest exterior corner of building	Date: 11/16-17/05 Start 12:55pm Finish 1:15pm

Sample Number	Sample Device	Sample Recovery	Depth (feet)	Detailed Soil and Rock Description	Natural Moisture Content %	OVA/PID/FID/OVM (ppm)	Remarks
	DP	50%	1	Asphalt, sand and gravel fill			
			2	Dark brown clay, moist, plastic, soft @ 4.5'			
			3				D = Dry M = Moist W = Wet
			4			0.1	
			5				fbg = feet below grade
		75%	6	Light brown clay, some sand and gravel			DP= Direct Push HSA=Hollow Stem Auger
			7	Brown-gray sandy clay, moist, soft			
			8			0.1	NA = Not Applicable
			9	Gravel and sand, wet			
			10				
BH-20; 14'		75%	11	Gray-brown clayey sand, saturated			
			12			0.1	
			13	Gray clay, moist, firm			
			14			0.2	
			15				
	HSA	15%	16	Saturated cobbles, not sufficient to sample			
			17	Saturated gray sand, no sufficient to sample			
		10%	18	Fine to medium sand, moist			
			19			0.0	
		50%	20				
		0%	21	No recovery (21-27')			
			27				
		50%	28	Brown-gray clayey sand, saturated		0.0	
			29				
			30				
			31				
			32				
			33				
			34				
			35			End of boring at 35'	

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual.

Groundwater Data
▼ Depth While Drilling NA
▽ Depth After Drilling NA

Auger Depth NA Rig Geoprobe
Rotary Depth NA Geologist Kim Miller
Driller/Co. Drilling Unlimited

Illinois Environmental Protection Agency

The Agency is authorized to require this information under 415 ILCS 5/4 and 21. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $25,000.00 for each day the failure continues, a fine up to $50,000.00 and

The Agency is authorized to require this information under 415 ILCS 5/4 and 21. Disclosure of this information is required. Failure to do so may result in a civil penalty to $25,000.00 for each day the failure continues, a fine up to $50,000.00 and imprisonment up to five years. This form has been approved by eh Forms Management

Illinois Environmental Protection Agency

Well Completion Report

Incident No.:	NA	Well No.:	MW-6 / BH-17
Site Name:	Inverse Investments	Date Drilled Start:	11/16/2005
Drilling Contractor:	Drilling Unlimited	Date Completed:	11/17/2005
Driller:		Geologist:	Kim Miller
Drilling Model:	GeoProbe/Hollow Stem Auger	Drilling Fluids (type):	None

Annular Space Details

Type of Surface Seal:	Concrete
Type of Annular Seal:	Concrete
Type of Bentonite Seal (Granular, Pellet):	3/8" Pellets
Type of Sand Pack:	Coarse sand #30, Fine sand #45-55

Well Construction Materials

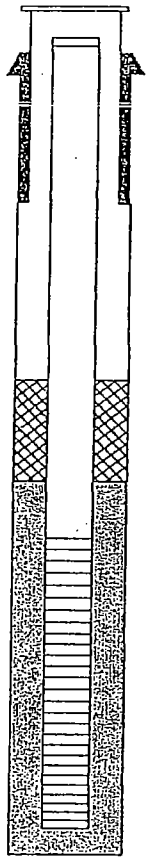
	Stainless Steel Specify Type	PVC Specify Type	Other Specify Type
Riser coupling joint			
Riser pipe above w.t.		2"DIAsch40	
Riser pipe below w.t.		2"DIAsch40	
Screen		2"DIAsch40	
Coupling joint screen to riser			
Protective casing	9"DIA Steel		

Measurements

To .01 ft (where applicable)

Riser pipe length (feet)	34.41
Screen length (feet)	10.00
Screen slot size	.01"
Protective casing length	16"
Depth to water	7.82
Elevation of water	741.97
Free product thickness	0.00"
Gallons removed (developed)	
Gallons removed (purged)	
Other	

Completed By: Michael Butler



Elevations - .01 ft.

750.38	Top of Protective Casing
749.79	Top of Riser Pipe
750.38	Ground Surface
750.38	Top of Annular Sealant
0"	Casing Stickup
748.88	Top of Seal
31.50	Total Seal Interval
717.38	Top of Sand
715.38	Top of Screen
10.00	Total Screen Interval
705.38	Bottom of Screen
706.38	Bottom of Borehole

Illinois Environmental Protection Agency

Well Completion Report

Incident No.:	NA	Well No.:	MW-7 / BH-20
Site Name:	Inverse Investments	Date Drilled Start:	11/16/2005
Drilling Contractor:	Drilling Unlimited	Date Completed:	11/17/2005
Driller:		Geologist:	Kim Miller
Drilling Model:	GeoProbe/Hollow Stem Auger	Drilling Fluids (type):	None

Annular Space Details

Type of Surface Seal:	Concrete
Type of Annular Seal:	Concrete
Type of Bentonite Seal (Granular, Pellet):	3/8" Pellets
Type of Sand Pack:	Coarse sand #30, Fine sand #45-55

Well Construction Materials

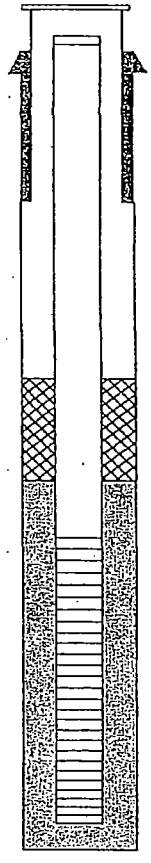
	Stainless Steel Specify Type	PVC Specify Type	Other Specify Type
Riser coupling joint			
Riser pipe above w.t.		2"DIAsch40	
Riser pipe below w.t.		2"DIAsch40	
Screen		2"DIAsch40	
Coupling joint screen to riser			
Protective casing	9"DIA Steel		

Measurements

To .01 ft (where applicable)

Riser pipe length (feet)	24.33
Screen length (feet)	10.00
Screen slot size	.01"
Protective casing length	16"
Depth to water	9.10
Elevation of water	740.69
Free product thickness	0.00"
Gallons removed (developed)	
Gallons removed (purged)	
Other	

Completed By: Michael Butler



Elevations - .01 ft.

750.46	Top of Protective Casing
749.79	Top of Riser Pipe
750.46	Ground Surface
750.46	Top of Annular Sealant
0"	Casing Stickup
748.96	Top of Seal
21.50	Total Seal Interval
727.46	Top of Sand
725.46	Top of Screen
10.00	Total Screen Interval
715.46	Bottom of Screen
715.46	Bottom of Borehole

APPENDIX B

ILLINOIS EPA'S OCTOBER 25, 2005 LETTER

APPENDIX C

LABORATORY REPORTS

ENVIRONMENTAL SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

November 29,2005

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

ESC Sample # : L223331-01

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Site ID : 3004 ELM, MCHENRY

Sample ID : BH-16 12FT

Project # : 1015-0001-02

Collected By : Kim Miller
Collection Date : 11/16/05 09:22

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	80.3		%	2540G	11/26/05	1
Volatile Organics						
Acetone	BDL	160	mg/kg	8260B	11/28/05	5200
Acrolein	BDL	320	mg/kg	8260B	11/28/05	5200
Acrylonitrile	BDL	65.	mg/kg	8260B	11/28/05	5200
Benzene	BDL	6.5	mg/kg	8260B	11/28/05	5200
Bromobenzene	BDL	6.5	mg/kg	8260B	11/28/05	5200
Bromodichloromethane	BDL	6.5	mg/kg	8260B	11/28/05	5200
Bromoform	BDL	6.5	mg/kg	8260B	11/28/05	5200
Bromomethane	BDL	6.5	mg/kg	8260B	11/28/05	5200
n-Butylbenzene	BDL	6.5	mg/kg	8260B	11/28/05	5200
sec-Butylbenzene	BDL	6.5	mg/kg	8260B	11/28/05	5200
tert-Butylbenzene	BDL	6.5	mg/kg	8260B	11/28/05	5200
Carbon tetrachloride	BDL	6.5	mg/kg	8260B	11/28/05	5200
Carbon disulfide	BDL	6.5	mg/kg	8260B	11/28/05	5200
Chlorobenzene	BDL	6.5	mg/kg	8260B	11/28/05	5200
Chlorodibromomethane	BDL	6.5	mg/kg	8260B	11/28/05	5200
Chloroethane	BDL	6.5	mg/kg	8260B	11/28/05	5200
2-Chloroethyl vinyl ether	BDL	320	mg/kg	8260B	11/28/05	5200
Chloroform	BDL	32.	mg/kg	8260B	11/28/05	5200
Chloromethane	BDL	6.5	mg/kg	8260B	11/28/05	5200
2-Chlorotoluene	BDL	6.5	mg/kg	8260B	11/28/05	5200
4-Chlorotoluene	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,2-Dibromo-3-Chloropropane	BDL	13.	mg/kg	8260B	11/28/05	5200
1,2-Dibromoethane	BDL	6.5	mg/kg	8260B	11/28/05	5200
Dibromomethane	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,2-Dichlorobenzene	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,3-Dichlorobenzene	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,4-Dichlorobenzene	BDL	6.5	mg/kg	8260B	11/28/05	5200
Dichlorodifluoromethane	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,1-Dichloroethane	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,2-Dichloroethane	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,1-Dichloroethene	BDL	6.5	mg/kg	8260B	11/28/05	5200
cis-1,2-Dichloroethene	BDL	6.5	mg/kg	8260B	11/28/05	5200
trans-1,2-Dichloroethene	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,2-Dichloropropane	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,1-Dichloropropene	BDL	6.5	mg/kg	8260B	11/28/05	5200

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

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Est. 1970

REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

November 29,2005

ESC Sample # : L223331-01

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Sample ID : BH-16 12FT

Collected By :
Collection Date : 11/16/05 09:22

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,3-Dichloropropane	BDL	6.5	mg/kg	8260B	11/28/05	5200
cis-1,3-Dichloropropene	BDL	6.5	mg/kg	8260B	11/28/05	5200
trans-1,3-Dichloropropene	BDL	6.5	mg/kg	8260B	11/28/05	5200
2,2-Dichloropropane	BDL	6.5	mg/kg	8260B	11/28/05	5200
Di-isopropyl ether	BDL	6.5	mg/kg	8260B	11/28/05	5200
Ethylbenzene	BDL	6.5	mg/kg	8260B	11/28/05	5200
Hexachlorobutadiene	BDL	6.5	mg/kg	8260B	11/28/05	5200
Isopropylbenzene	BDL	6.5	mg/kg	8260B	11/28/05	5200
p-Isopropyltoluene	BDL	6.5	mg/kg	8260B	11/28/05	5200
2-Butanone (MEK)	BDL	65.	mg/kg	8260B	11/28/05	5200
Methylene Chloride	BDL	32.	mg/kg	8260B	11/28/05	5200
4-Methyl-2-pentanone (MIBK)	BDL	65.	mg/kg	8260B	11/28/05	5200
2-Hexanone	BDL	65.	mg/kg	8260B	11/28/05	5200
Methyl tert-butyl ether	BDL	6.5	mg/kg	8260B	11/28/05	5200
Naphthalene	BDL	32.	mg/kg	8260B	11/28/05	5200
n-Propylbenzene	BDL	6.5	mg/kg	8260B	11/28/05	5200
Styrene	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,1,1,2-Tetrachloroethane	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,1,2,2-Tetrachloroethane	BDL	6.5	mg/kg	8260B	11/28/05	5200
Tetrachloroethene	560	6.5	mg/kg	8260B	11/28/05	5200
Toluene	BDL	32.	mg/kg	8260B	11/28/05	5200
1,2,3-Trichlorobenzene	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,2,4-Trichlorobenzene	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,1,1-Trichloroethane	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,1,2-Trichloroethane	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,1,2-Trichloro-1,2,2-trifluoro	BDL	6.5	mg/kg	8260B	11/28/05	5200
Trichloroethene	24.	6.5	mg/kg	8260B	11/28/05	5200
Trichlorofluoromethane	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,2,3-Trichloropropane	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,2,4-Trimethylbenzene	BDL	6.5	mg/kg	8260B	11/28/05	5200
1,3,5-Trimethylbenzene	BDL	6.5	mg/kg	8260B	11/28/05	5200
Vinyl chloride	BDL	6.5	mg/kg	8260B	11/28/05	5200
Xylenes, Total	BDL	19.	mg/kg	8260B	11/28/05	5200
Surrogate Recovery						
Toluene-d8	93.		% Rec.	8260B	11/28/05	5200
Dibromofluoromethane	86.		% Rec.	8260B	11/28/05	5200
4-Bromofluorobenzene	100		% Rec.	8260B	11/28/05	5200

John Hawkins, ESC Representative

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

Reported: 11/29/05 14:13 Printed: 11/29/05 14:13

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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

November 29,2005

ESC Sample # : L223331-02

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Sample ID : BH-15 2FT

Collected By : Kim Miller
Collection Date : 11/16/05 09:48

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	84.2		%	2540G	11/26/05	1
Volatile Organics						
Acetone	0.062	0.030	mg/kg	8260B	11/27/05	1
Acrolein	BDL	0.059	mg/kg	8260B	11/27/05	1
Acrylonitrile	BDL	0.012	mg/kg	8260B	11/27/05	1
Benzene	0.0015	0.0012	mg/kg	8260B	11/27/05	1
Bromobenzene	BDL	0.0012	mg/kg	8260B	11/27/05	1
Bromodichloromethane	BDL	0.0012	mg/kg	8260B	11/27/05	1
Bromoform	BDL	0.0012	mg/kg	8260B	11/27/05	1
Bromomethane	BDL	0.0012	mg/kg	8260B	11/27/05	1
n-Butylbenzene	BDL	0.0012	mg/kg	8260B	11/27/05	1
sec-Butylbenzene	BDL	0.0012	mg/kg	8260B	11/27/05	1
tert-Butylbenzene	BDL	0.0012	mg/kg	8260B	11/27/05	1
Carbon tetrachloride	BDL	0.0012	mg/kg	8260B	11/27/05	1
Carbon disulfide	0.0015	0.0012	mg/kg	8260B	11/27/05	1
Chlorobenzene	BDL	0.0012	mg/kg	8260B	11/27/05	1
Chlorodibromomethane	BDL	0.0012	mg/kg	8260B	11/27/05	1
Chloroethane	BDL	0.0012	mg/kg	8260B	11/27/05	1
2-Chloroethyl vinyl ether	BDL	0.059	mg/kg	8260B	11/27/05	1
Chloroform	BDL	0.0059	mg/kg	8260B	11/27/05	1
Chloromethane	BDL	0.0012	mg/kg	8260B	11/27/05	1
2-Chlorotoluene	BDL	0.0012	mg/kg	8260B	11/27/05	1
4-Chlorotoluene	BDL	0.0012	mg/kg	8260B	11/27/05	1
1,2-Dibromo-3-Chloropropane	BDL	0.0024	mg/kg	8260B	11/27/05	1
1,2-Dibromoethane	BDL	0.0012	mg/kg	8260B	11/27/05	1
Dibromomethane	BDL	0.0012	mg/kg	8260B	11/27/05	1
1,2-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	11/27/05	1
1,3-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	11/27/05	1
1,4-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	11/27/05	1
Dichlorodifluoromethane	BDL	0.0012	mg/kg	8260B	11/27/05	1
1,1-Dichloroethane	BDL	0.0012	mg/kg	8260B	11/27/05	1
1,2-Dichloroethane	BDL	0.0012	mg/kg	8260B	11/27/05	1
1,1-Dichloroethene	BDL	0.0012	mg/kg	8260B	11/27/05	1
cis-1,2-Dichloroethene	0.0078	0.0012	mg/kg	8260B	11/27/05	1
trans-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	11/27/05	1
1,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	11/27/05	1
1,1-Dichloropropene	BDL	0.0012	mg/kg	8260B	11/27/05	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

November 29,2005

ESC Sample # : L223331-02

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Sample ID : BH-15 2FT

Collected By :
Collection Date : 11/16/05 09:48

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,3-Dichloropropane	BDL	0.0012	mg/kg	8260B	11/27/05	1
cis-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	11/27/05	1
trans-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	11/27/05	1
2,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	11/27/05	1
Di-isopropyl ether	BDL	0.0012	mg/kg	8260B	11/27/05	1
Ethylbenzene	0.0012	0.0012	mg/kg	8260B	11/27/05	1
Hexachlorobutadiene	BDL	0.0012	mg/kg	8260B	11/27/05	1
Isopropylbenzene	BDL	0.0012	mg/kg	8260B	11/27/05	1
p-Isopropyltoluene	BDL	0.0012	mg/kg	8260B	11/27/05	1
2-Butanone (MEK)	BDL	0.012	mg/kg	8260B	11/27/05	1
Methylene Chloride	BDL	0.0059	mg/kg	8260B	11/27/05	1
4-Methyl-2-pentanone (MIBK)	BDL	0.012	mg/kg	8260B	11/27/05	1
2-Hexanone	BDL	0.012	mg/kg	8260B	11/27/05	1
Methyl tert-butyl ether	BDL	0.0012	mg/kg	8260B	11/27/05	1
Naphthalene	BDL	0.0059	mg/kg	8260B	11/27/05	1
n-Propylbenzene	BDL	0.0012	mg/kg	8260B	11/27/05	1
Styrene	BDL	0.0012	mg/kg	8260B	11/27/05	1
1,1,1,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	11/27/05	1
1,1,2,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	11/27/05	1
Tetrachloroethene	0.14	0.0012	mg/kg	8260B	11/27/05	1
Toluene	BDL	0.0059	mg/kg	8260B	11/27/05	1
1,2,3-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	11/27/05	1
1,2,4-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	11/27/05	1
1,1,1-Trichloroethane	BDL	0.0012	mg/kg	8260B	11/27/05	1
1,1,2-Trichloroethane	BDL	0.0012	mg/kg	8260B	11/27/05	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0012	mg/kg	8260B	11/27/05	1
Trichloroethene	0.031	0.0012	mg/kg	8260B	11/27/05	1
Trichlorofluoromethane	BDL	0.0012	mg/kg	8260B	11/27/05	1
1,2,3-Trichloropropane	BDL	0.0012	mg/kg	8260B	11/27/05	1
1,2,4-Trimethylbenzene	0.0028	0.0012	mg/kg	8260B	11/27/05	1
1,3,5-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	11/27/05	1
Vinyl chloride	BDL	0.0012	mg/kg	8260B	11/27/05	1
Xylenes, Total	0.0038	0.0036	mg/kg	8260B	11/27/05	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	11/27/05	1
Dibromofluoromethane	85.		% Rec.	8260B	11/27/05	1
4-Bromofluorobenzene	94.		% Rec.	8260B	11/27/05	1

John Hawkins

John Hawkins, ESC Representative

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

Reported: 11/29/05 14:13 Printed: 11/29/05 14:13

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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

November 29,2005

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Sample ID : BH-18 17FT

Collected By : Kim Miller
Collection Date : 11/16/05 10:35

ESC Sample # : L223331-03

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	87.5		%	2540G	11/26/05	1
Volatile Organics						
Acetone	BDL	0.028	mg/kg	8260B	11/27/05	1
Acrolein	BDL	0.057	mg/kg	8260B	11/27/05	1
Acrylonitrile	BDL	0.011	mg/kg	8260B	11/27/05	1
Benzene	0.0011	0.0011	mg/kg	8260B	11/27/05	1
Bromobenzene	BDL	0.0011	mg/kg	8260B	11/27/05	1
Bromodichloromethane	BDL	0.0011	mg/kg	8260B	11/27/05	1
Bromoform	BDL	0.0011	mg/kg	8260B	11/27/05	1
Bromomethane	BDL	0.0011	mg/kg	8260B	11/27/05	1
n-Butylbenzene	BDL	0.0011	mg/kg	8260B	11/27/05	1
sec-Butylbenzene	BDL	0.0011	mg/kg	8260B	11/27/05	1
tert-Butylbenzene	BDL	0.0011	mg/kg	8260B	11/27/05	1
Carbon tetrachloride	BDL	0.0011	mg/kg	8260B	11/27/05	1
Carbon disulfide	BDL	0.0011	mg/kg	8260B	11/27/05	1
Chlorobenzene	BDL	0.0011	mg/kg	8260B	11/27/05	1
Chlorodibromomethane	BDL	0.0011	mg/kg	8260B	11/27/05	1
Chloroethane	BDL	0.0011	mg/kg	8260B	11/27/05	1
2-Chloroethyl vinyl ether	BDL	0.057	mg/kg	8260B	11/27/05	1
Chloroform	BDL	0.0057	mg/kg	8260B	11/27/05	1
Chloromethane	BDL	0.0011	mg/kg	8260B	11/27/05	1
2-Chlorotoluene	BDL	0.0011	mg/kg	8260B	11/27/05	1
4-Chlorotoluene	BDL	0.0011	mg/kg	8260B	11/27/05	1
1,2-Dibromo-3-Chloropropane	BDL	0.0023	mg/kg	8260B	11/27/05	1
1,2-Dibromoethane	BDL	0.0011	mg/kg	8260B	11/27/05	1
Dibromomethane	BDL	0.0011	mg/kg	8260B	11/27/05	1
1,2-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	11/27/05	1
1,3-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	11/27/05	1
1,4-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	11/27/05	1
Dichlorodifluoromethane	BDL	0.0011	mg/kg	8260B	11/27/05	1
1,1-Dichloroethane	BDL	0.0011	mg/kg	8260B	11/27/05	1
1,2-Dichloroethane	BDL	0.0011	mg/kg	8260B	11/27/05	1
1,1-Dichloroethene	BDL	0.0011	mg/kg	8260B	11/27/05	1
cis-1,2-Dichloroethene	0.0067	0.0011	mg/kg	8260B	11/27/05	1
trans-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	11/27/05	1
1,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	11/27/05	1
1,1-Dichloropropene	BDL	0.0011	mg/kg	8260B	11/27/05	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

November 29,2005

ESC Sample # : L223331-03

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Sample ID : BH-18 17FT

Collected By : Kim Miller
Collection Date : 11/16/05 10:35

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,3-Dichloropropane	BDL	0.0011	mg/kg	8260B	11/27/05	1
cis-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	11/27/05	1
trans-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	11/27/05	1
2,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	11/27/05	1
Di-isopropyl ether	BDL	0.0011	mg/kg	8260B	11/27/05	1
Ethylbenzene	BDL	0.0011	mg/kg	8260B	11/27/05	1
Hexachlorobutadiene	BDL	0.0011	mg/kg	8260B	11/27/05	1
Isopropylbenzene	BDL	0.0011	mg/kg	8260B	11/27/05	1
p-Isopropyltoluene	BDL	0.0011	mg/kg	8260B	11/27/05	1
2-Butanone (MEK)	BDL	0.011	mg/kg	8260B	11/27/05	1
Methylene Chloride	BDL	0.0057	mg/kg	8260B	11/27/05	1
4-Methyl-2-pentanone (MIBK)	BDL	0.011	mg/kg	8260B	11/27/05	1
2-Hexanone	BDL	0.011	mg/kg	8260B	11/27/05	1
Methyl tert-butyl ether	BDL	0.0011	mg/kg	8260B	11/27/05	1
Naphthalene	BDL	0.0057	mg/kg	8260B	11/27/05	1
n-Propylbenzene	BDL	0.0011	mg/kg	8260B	11/27/05	1
Styrene	BDL	0.0011	mg/kg	8260B	11/27/05	1
1,1,1,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	11/27/05	1
1,1,2,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	11/27/05	1
Tetrachloroethene	0.37	0.0011	mg/kg	8260B	11/27/05	1
Toluene	BDL	0.0057	mg/kg	8260B	11/27/05	1
1,2,3-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	11/27/05	1
1,2,4-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	11/27/05	1
1,1,1-Trichloroethane	BDL	0.0011	mg/kg	8260B	11/27/05	1
1,1,2-Trichloroethane	BDL	0.0011	mg/kg	8260B	11/27/05	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0011	mg/kg	8260B	11/27/05	1
Trichloroethene	0.029	0.0011	mg/kg	8260B	11/27/05	1
Trichlorofluoromethane	BDL	0.0011	mg/kg	8260B	11/27/05	1
1,2,3-Trichloropropane	BDL	0.0011	mg/kg	8260B	11/27/05	1
1,2,4-Trimethylbenzene	0.0012	0.0011	mg/kg	8260B	11/27/05	1
1,3,5-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	11/27/05	1
Vinyl chloride	BDL	0.0011	mg/kg	8260B	11/27/05	1
Xylenes, Total	BDL	0.0034	mg/kg	8260B	11/27/05	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	11/27/05	1
Dibromofluoromethane	91.		% Rec.	8260B	11/27/05	1
4-Bromofluorobenzene	110		% Rec.	8260B	11/27/05	1

John Hawkins, ESC Representative

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

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Est. 1970

REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

November 29,2005

ESC Sample # : L223331-04

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Sample ID : BH-19 12FT

Collected By : Kim Miller
Collection Date : 11/16/05 11:43

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	84.5		%	2540G	11/26/05	1
Volatile Organics						
Acetone	7.2	1.0	mg/kg	8260B	11/29/05	34
Acrolein	BDL	2.0	mg/kg	8260B	11/29/05	34
Acrylonitrile	BDL	0.40	mg/kg	8260B	11/29/05	34
Benzene	BDL	0.040	mg/kg	8260B	11/29/05	34
Bromobenzene	BDL	0.040	mg/kg	8260B	11/29/05	34
Bromodichloromethane	BDL	0.040	mg/kg	8260B	11/29/05	34
Bromoform	BDL	0.040	mg/kg	8260B	11/29/05	34
Bromomethane	BDL	0.040	mg/kg	8260B	11/29/05	34
n-Butylbenzene	BDL	0.040	mg/kg	8260B	11/29/05	34
sec-Butylbenzene	BDL	0.040	mg/kg	8260B	11/29/05	34
tert-Butylbenzene	BDL	0.040	mg/kg	8260B	11/29/05	34
Carbon tetrachloride	BDL	0.040	mg/kg	8260B	11/29/05	34
Carbon disulfide	BDL	0.040	mg/kg	8260B	11/29/05	34
Chlorobenzene	BDL	0.040	mg/kg	8260B	11/29/05	34
Chlorodibromomethane	BDL	0.040	mg/kg	8260B	11/29/05	34
Chloroethane	BDL	0.040	mg/kg	8260B	11/29/05	34
2-Chloroethyl vinyl ether	BDL	2.0	mg/kg	8260B	11/29/05	34
Chloroform	BDL	0.20	mg/kg	8260B	11/29/05	34
Chloromethane	BDL	0.040	mg/kg	8260B	11/29/05	34
2-Chlorotoluene	BDL	0.040	mg/kg	8260B	11/29/05	34
4-Chlorotoluene	BDL	0.040	mg/kg	8260B	11/29/05	34
1,2-Dibromo-3-Chloropropane	BDL	0.080	mg/kg	8260B	11/29/05	34
1,2-Dibromoethane	BDL	0.040	mg/kg	8260B	11/29/05	34
Dibromomethane	BDL	0.040	mg/kg	8260B	11/29/05	34
1,2-Dichlorobenzene	BDL	0.040	mg/kg	8260B	11/29/05	34
1,3-Dichlorobenzene	BDL	0.040	mg/kg	8260B	11/29/05	34
1,4-Dichlorobenzene	BDL	0.040	mg/kg	8260B	11/29/05	34
Dichlorodifluoromethane	BDL	0.040	mg/kg	8260B	11/29/05	34
1,1-Dichloroethane	BDL	0.040	mg/kg	8260B	11/29/05	34
1,2-Dichloroethane	BDL	0.040	mg/kg	8260B	11/29/05	34
1,1-Dichloroethene	BDL	0.040	mg/kg	8260B	11/29/05	34
cis-1,2-Dichloroethene	3.7	0.040	mg/kg	8260B	11/29/05	34
trans-1,2-Dichloroethene	BDL	0.040	mg/kg	8260B	11/29/05	34
1,2-Dichloropropane	BDL	0.040	mg/kg	8260B	11/29/05	34
1,1-Dichloropropene	BDL	0.040	mg/kg	8260B	11/29/05	34

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

November 29,2005

ESC Sample # : L223331-04

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Sample ID : BH-19 12FT

Collected By : Kim Miller
Collection Date : 11/16/05 11:43

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,3-Dichloropropane	BDL	0.040	mg/kg	8260B	11/29/05	34
cis-1,3-Dichloropropene	BDL	0.040	mg/kg	8260B	11/29/05	34
trans-1,3-Dichloropropene	BDL	0.040	mg/kg	8260B	11/29/05	34
2,2-Dichloropropane	BDL	0.040	mg/kg	8260B	11/29/05	34
Di-isopropyl ether	BDL	0.040	mg/kg	8260B	11/29/05	34
Ethylbenzene	BDL	0.040	mg/kg	8260B	11/29/05	34
Hexachlorobutadiene	BDL	0.040	mg/kg	8260B	11/29/05	34
Isopropylbenzene	BDL	0.040	mg/kg	8260B	11/29/05	34
p-Isopropyltoluene	BDL	0.040	mg/kg	8260B	11/29/05	34
2-Butanone (MEK)	BDL	0.40	mg/kg	8260B	11/29/05	34
Methylene Chloride	BDL	0.20	mg/kg	8260B	11/29/05	34
4-Methyl-2-pentanone (MIBK)	BDL	0.40	mg/kg	8260B	11/29/05	34
2-Hexanone	BDL	0.40	mg/kg	8260B	11/29/05	34
Methyl tert-butyl ether	BDL	0.040	mg/kg	8260B	11/29/05	34
Naphthalene	BDL	0.20	mg/kg	8260B	11/29/05	34
n-Propylbenzene	BDL	0.040	mg/kg	8260B	11/29/05	34
Styrene	BDL	0.040	mg/kg	8260B	11/29/05	34
1,1,1,2-Tetrachloroethane	BDL	0.040	mg/kg	8260B	11/29/05	34
1,1,2,2-Tetrachloroethane	BDL	0.040	mg/kg	8260B	11/29/05	34
Tetrachloroethene	0.20	0.040	mg/kg	8260B	11/29/05	34
Toluene	BDL	0.20	mg/kg	8260B	11/29/05	34
1,2,3-Trichlorobenzene	BDL	0.040	mg/kg	8260B	11/29/05	34
1,2,4-Trichlorobenzene	BDL	0.040	mg/kg	8260B	11/29/05	34
1,1,1-Trichloroethane	BDL	0.040	mg/kg	8260B	11/29/05	34
1,1,2-Trichloroethane	BDL	0.040	mg/kg	8260B	11/29/05	34
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.040	mg/kg	8260B	11/29/05	34
Trichloroethene	0.66	0.040	mg/kg	8260B	11/29/05	34
Trichlorofluoromethane	BDL	0.040	mg/kg	8260B	11/29/05	34
1,2,3-Trichloropropane	BDL	0.040	mg/kg	8260B	11/29/05	34
1,2,4-Trimethylbenzene	BDL	0.040	mg/kg	8260B	11/29/05	34
1,3,5-Trimethylbenzene	BDL	0.040	mg/kg	8260B	11/29/05	34
Vinyl chloride	BDL	0.040	mg/kg	8260B	11/29/05	34
Xylenes, Total	BDL	0.12	mg/kg	8260B	11/29/05	34
Surrogate Recovery						
Toluene-d8	97.		% Rec.	8260B	11/29/05	34
Dibromofluoromethane	77.		% Rec.	8260B	11/29/05	34
4-Bromofluorobenzene	110		% Rec.	8260B	11/29/05	34

John Hawkins, ESC Representative

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

The reported analytical results relate only to the sample submitted
Reported: 11/29/05 14:13 Printed: 11/29/05 14:13

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REPORT OF ANALYSIS

November 29,2005

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

ESC Sample # : L223331-05

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Site ID : 3004 ELM, MCHENRY

Sample ID : BH-17 3FT

Project # : 1015-0001-02

Collected By : Kim Miller
Collection Date : 11/16/05 12:21

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	88.2		%	2540G	11/26/05	1
Volatile Organics						
Acetone	0.52	0.028	mg/kg	8260B	11/29/05	1
Acrolein	BDL	0.057	mg/kg	8260B	11/29/05	1
Acrylonitrile	BDL	0.011	mg/kg	8260B	11/29/05	1
Benzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Bromobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Bromodichloromethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
Bromoform	BDL	0.0011	mg/kg	8260B	11/29/05	1
Bromomethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
n-Butylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
sec-Butylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
tert-Butylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Carbon tetrachloride	BDL	0.0011	mg/kg	8260B	11/29/05	1
Carbon disulfide	BDL	0.0011	mg/kg	8260B	11/29/05	1
Chlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Chlorodibromomethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
Chloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
2-Chloroethyl vinyl ether	BDL	0.057	mg/kg	8260B	11/29/05	1
Chloroform	BDL	0.0057	mg/kg	8260B	11/29/05	1
Chloromethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
2-Chlorotoluene	BDL	0.0011	mg/kg	8260B	11/29/05	1
4-Chlorotoluene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2-Dibromo-3-Chloropropane	BDL	0.0023	mg/kg	8260B	11/29/05	1
1,2-Dibromoethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
Dibromomethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,3-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,4-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Dichlorodifluoromethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1-Dichloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2-Dichloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1-Dichloroethene	BDL	0.0011	mg/kg	8260B	11/29/05	1
cis-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	11/29/05	1
trans-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1-Dichloropropene	BDL	0.0011	mg/kg	8260B	11/29/05	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

November 29,2005

ESC Sample # : L223331-05

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Site ID : 3004 ELM, MCHENRY

Sample ID : BH-17 3FT

Project # : 1015-0001-02

Collected By : Kim Miller
Collection Date : 11/16/05 12:21

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,3-Dichloropropane	BDL	0.0011	mg/kg	8260B	11/29/05	1
cis-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	11/29/05	1
trans-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	11/29/05	1
2,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	11/29/05	1
Di-isopropyl ether	BDL	0.0011	mg/kg	8260B	11/29/05	1
Ethylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Hexachlorobutadiene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Isopropylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
p-Isopropyltoluene	BDL	0.0011	mg/kg	8260B	11/29/05	1
2-Butanone (MEK)	BDL	0.011	mg/kg	8260B	11/29/05	1
Methylene Chloride	BDL	0.0057	mg/kg	8260B	11/29/05	1
4-Methyl-2-pentanone (MIBK)	BDL	0.011	mg/kg	8260B	11/29/05	1
2-Hexanone	BDL	0.011	mg/kg	8260B	11/29/05	1
Methyl tert-butyl ether	BDL	0.0011	mg/kg	8260B	11/29/05	1
Naphthalene	BDL	0.0057	mg/kg	8260B	11/29/05	1
n-Propylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Styrene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1,1,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1,2,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
Tetrachloroethene	0.0052	0.0011	mg/kg	8260B	11/29/05	1
Toluene	BDL	0.0057	mg/kg	8260B	11/29/05	1
1,2,3-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2,4-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1,1-Trichloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1,2-Trichloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0011	mg/kg	8260B	11/29/05	1
Trichloroethene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Trichlorofluoromethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2,3-Trichloropropane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2,4-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,3,5-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Vinyl chloride	BDL	0.0011	mg/kg	8260B	11/29/05	1
Xylenes, Total	BDL	0.0034	mg/kg	8260B	11/29/05	1
Surrogate Recovery						
Toluene-d8	98.		% Rec.	8260B	11/29/05	1
Dibromofluoromethane	80.		% Rec.	8260B	11/29/05	1
4-Bromofluorobenzene	100		% Rec.	8260B	11/29/05	1

John Hawkins

John Hawkins, ESC Representative

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
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Reported: 11/29/05 14:13 Printed: 11/29/05 14:13

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REPORT OF ANALYSIS

November 29,2005

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

ESC Sample # : L223331-06

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Site ID : 3004 ELM, MCHENRY

Sample ID : BH-17 12FT

Project # : 1015-0001-02

Collected By : Kim Miller
Collection Date : 11/16/05 12:37

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	79.6		%	2540G	11/26/05	1
Volatile Organics						
Acetone	BDL	12.	mg/kg	8260B	11/28/05	385
Acrolein	BDL	24.	mg/kg	8260B	11/28/05	385
Acrylonitrile	BDL	4.8	mg/kg	8260B	11/28/05	385
Benzene	BDL	0.48	mg/kg	8260B	11/28/05	385
Bromobenzene	BDL	0.48	mg/kg	8260B	11/28/05	385
Bromodichloromethane	BDL	0.48	mg/kg	8260B	11/28/05	385
Bromoform	BDL	0.48	mg/kg	8260B	11/28/05	385
Bromomethane	BDL	0.48	mg/kg	8260B	11/28/05	385
n-Butylbenzene	BDL	0.48	mg/kg	8260B	11/28/05	385
sec-Butylbenzene	BDL	0.48	mg/kg	8260B	11/28/05	385
tert-Butylbenzene	BDL	0.48	mg/kg	8260B	11/28/05	385
Carbon tetrachloride	BDL	0.48	mg/kg	8260B	11/28/05	385
Carbon disulfide	BDL	0.48	mg/kg	8260B	11/28/05	385
Chlorobenzene	BDL	0.48	mg/kg	8260B	11/28/05	385
Chlorodibromomethane	BDL	0.48	mg/kg	8260B	11/28/05	385
Chloroethane	BDL	0.48	mg/kg	8260B	11/28/05	385
2-Chloroethyl vinyl ether	BDL	24.	mg/kg	8260B	11/28/05	385
Chloroform	BDL	2.4	mg/kg	8260B	11/28/05	385
Chloromethane	BDL	0.48	mg/kg	8260B	11/28/05	385
2-Chlorotoluene	BDL	0.48	mg/kg	8260B	11/28/05	385
4-Chlorotoluene	BDL	0.48	mg/kg	8260B	11/28/05	385
1,2-Dibromo-3-Chloropropane	BDL	0.97	mg/kg	8260B	11/28/05	385
1,2-Dibromoethane	BDL	0.48	mg/kg	8260B	11/28/05	385
Dibromomethane	BDL	0.48	mg/kg	8260B	11/28/05	385
1,2-Dichlorobenzene	BDL	0.48	mg/kg	8260B	11/28/05	385
1,3-Dichlorobenzene	BDL	0.48	mg/kg	8260B	11/28/05	385
1,4-Dichlorobenzene	BDL	0.48	mg/kg	8260B	11/28/05	385
Dichlorodifluoromethane	BDL	0.48	mg/kg	8260B	11/28/05	385
1,1-Dichloroethane	BDL	0.48	mg/kg	8260B	11/28/05	385
1,2-Dichloroethane	BDL	0.48	mg/kg	8260B	11/28/05	385
1,1-Dichloroethene	BDL	0.48	mg/kg	8260B	11/28/05	385
cis-1,2-Dichloroethene	2.4	0.48	mg/kg	8260B	11/28/05	385
trans-1,2-Dichloroethene	BDL	0.48	mg/kg	8260B	11/28/05	385
1,2-Dichloropropane	BDL	0.48	mg/kg	8260B	11/28/05	385
1,1-Dichloropropene	BDL	0.48	mg/kg	8260B	11/28/05	385

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

November 29,2005

ESC Sample # : L223331-06

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Site ID : 3004 ELM, MCHENRY

Sample ID : BH-17 12FT

Project # : 1015-0001-02

Collected By : Kim Miller
Collection Date : 11/16/05 12:37

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,3-Dichloropropane	BDL	0.48	mg/kg	8260B	11/28/05	385
cis-1,3-Dichloropropene	BDL	0.48	mg/kg	8260B	11/28/05	385
trans-1,3-Dichloropropene	BDL	0.48	mg/kg	8260B	11/28/05	385
2,2-Dichloropropane	BDL	0.48	mg/kg	8260B	11/28/05	385
Di-isopropyl ether	BDL	0.48	mg/kg	8260B	11/28/05	385
Ethylbenzene	BDL	0.48	mg/kg	8260B	11/28/05	385
Hexachlorobutadiene	BDL	0.48	mg/kg	8260B	11/28/05	385
Isopropylbenzene	BDL	0.48	mg/kg	8260B	11/28/05	385
p-Isopropyltoluene	BDL	0.48	mg/kg	8260B	11/28/05	385
2-Butanone (MEK)	BDL	4.8	mg/kg	8260B	11/28/05	385
Methylene Chloride	BDL	2.4	mg/kg	8260B	11/28/05	385
4-Methyl-2-pentanone (MIBK)	BDL	4.8	mg/kg	8260B	11/28/05	385
2-Hexanone	BDL	4.8	mg/kg	8260B	11/28/05	385
Methyl tert-butyl ether	BDL	0.48	mg/kg	8260B	11/28/05	385
Naphthalene	BDL	2.4	mg/kg	8260B	11/28/05	385
n-Propylbenzene	BDL	0.48	mg/kg	8260B	11/28/05	385
Styrene	BDL	0.48	mg/kg	8260B	11/28/05	385
1,1,1,2-Tetrachloroethane	BDL	0.48	mg/kg	8260B	11/28/05	385
1,1,2,2-Tetrachloroethane	BDL	0.48	mg/kg	8260B	11/28/05	385
Tetrachloroethene	350	0.48	mg/kg	8260B	11/28/05	385
Toluene	BDL	2.4	mg/kg	8260B	11/28/05	385
1,2,3-Trichlorobenzene	BDL	0.48	mg/kg	8260B	11/28/05	385
1,2,4-Trichlorobenzene	BDL	0.48	mg/kg	8260B	11/28/05	385
1,1,1-Trichloroethane	BDL	0.48	mg/kg	8260B	11/28/05	385
1,1,2-Trichloroethane	BDL	0.48	mg/kg	8260B	11/28/05	385
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.48	mg/kg	8260B	11/28/05	385
Trichloroethene	11.	0.48	mg/kg	8260B	11/28/05	385
Trichlorofluoromethane	BDL	0.48	mg/kg	8260B	11/28/05	385
1,2,3-Trichloropropane	BDL	0.48	mg/kg	8260B	11/28/05	385
1,2,4-Trimethylbenzene	BDL	0.48	mg/kg	8260B	11/28/05	385
1,3,5-Trimethylbenzene	BDL	0.48	mg/kg	8260B	11/28/05	385
Vinyl chloride	BDL	0.48	mg/kg	8260B	11/28/05	385
Xylenes, Total	BDL	1.4	mg/kg	8260B	11/28/05	385
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	11/28/05	385
Dibromofluoromethane	78.		% Rec.	8260B	11/28/05	385
4-Bromofluorobenzene	120		% Rec.	8260B	11/28/05	385

John Hawkins
John Hawkins, ESC Representative

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

Reported: 11/29/05 14:13 Printed: 11/29/05 14:14

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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

November 29,2005

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Sample ID : BH-20 14FT

Collected By : Kim Miller
Collection Date : 11/16/05 13:10

ESC Sample # : L223331-07

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	84.4		%	2540G	11/26/05	1
Volatile Organics						
Acetone	0.38	0.030	mg/kg	8260B	11/29/05	1
Acrolein	BDL	0.059	mg/kg	8260B	11/29/05	1
Acrylonitrile	BDL	0.012	mg/kg	8260B	11/29/05	1
Benzene	BDL	0.0012	mg/kg	8260B	11/29/05	1
Bromobenzene	BDL	0.0012	mg/kg	8260B	11/29/05	1
Bromodichloromethane	BDL	0.0012	mg/kg	8260B	11/29/05	1
Bromoform	BDL	0.0012	mg/kg	8260B	11/29/05	1
Bromomethane	BDL	0.0012	mg/kg	8260B	11/29/05	1
n-Butylbenzene	BDL	0.0012	mg/kg	8260B	11/29/05	1
sec-Butylbenzene	BDL	0.0012	mg/kg	8260B	11/29/05	1
tert-Butylbenzene	BDL	0.0012	mg/kg	8260B	11/29/05	1
Carbon tetrachloride	BDL	0.0012	mg/kg	8260B	11/29/05	1
Carbon disulfide	BDL	0.0012	mg/kg	8260B	11/29/05	1
Chlorobenzene	BDL	0.0012	mg/kg	8260B	11/29/05	1
Chlorodibromomethane	BDL	0.0012	mg/kg	8260B	11/29/05	1
Chloroethane	BDL	0.0012	mg/kg	8260B	11/29/05	1
2-Chloroethyl vinyl ether	BDL	0.059	mg/kg	8260B	11/29/05	1
Chloroform	BDL	0.0059	mg/kg	8260B	11/29/05	1
Chloromethane	BDL	0.0012	mg/kg	8260B	11/29/05	1
2-Chlorotoluene	BDL	0.0012	mg/kg	8260B	11/29/05	1
4-Chlorotoluene	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,2-Dibromo-3-Chloropropane	BDL	0.0024	mg/kg	8260B	11/29/05	1
1,2-Dibromoethane	BDL	0.0012	mg/kg	8260B	11/29/05	1
Dibromomethane	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,2-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,3-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,4-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	11/29/05	1
Dichlorodifluoromethane	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,1-Dichloroethane	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,2-Dichloroethane	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,1-Dichloroethene	BDL	0.0012	mg/kg	8260B	11/29/05	1
cis-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	11/29/05	1
trans-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,1-Dichloropropene	BDL	0.0012	mg/kg	8260B	11/29/05	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

Note:

The reported analytical results relate only to the sample submitted

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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

November 29,2005

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Sample ID : BH-20 14FT

Collected By : Kim Miller
Collection Date : 11/16/05 13:10

ESC Sample # : L223331-07

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,3-Dichloropropane	BDL	0.0012	mg/kg	8260B	11/29/05	1
cis-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	11/29/05	1
trans-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	11/29/05	1
2,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	11/29/05	1
Di-isopropyl ether	BDL	0.0012	mg/kg	8260B	11/29/05	1
Ethylbenzene	BDL	0.0012	mg/kg	8260B	11/29/05	1
Hexachlorobutadiene	BDL	0.0012	mg/kg	8260B	11/29/05	1
Isopropylbenzene	BDL	0.0012	mg/kg	8260B	11/29/05	1
p-Isopropyltoluene	BDL	0.0012	mg/kg	8260B	11/29/05	1
2-Butanone (MEK)	BDL	0.012	mg/kg	8260B	11/29/05	1
Methylene Chloride	BDL	0.0059	mg/kg	8260B	11/29/05	1
4-Methyl-2-pentanone (MIBK)	BDL	0.012	mg/kg	8260B	11/29/05	1
2-Hexanone	BDL	0.012	mg/kg	8260B	11/29/05	1
Methyl tert-butyl ether	BDL	0.0012	mg/kg	8260B	11/29/05	1
Naphthalene	BDL	0.0059	mg/kg	8260B	11/29/05	1
n-Propylbenzene	BDL	0.0012	mg/kg	8260B	11/29/05	1
Styrene	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,1,1,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,1,2,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	11/29/05	1
Tetrachloroethene	0.0017	0.0012	mg/kg	8260B	11/29/05	1
Toluene	BDL	0.0059	mg/kg	8260B	11/29/05	1
1,2,3-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,2,4-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,1,1-Trichloroethane	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,1,2-Trichloroethane	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0012	mg/kg	8260B	11/29/05	1
Trichloroethene	BDL	0.0012	mg/kg	8260B	11/29/05	1
Trichlorofluoromethane	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,2,3-Trichloropropane	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,2,4-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	11/29/05	1
1,3,5-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	11/29/05	1
Vinyl chloride	BDL	0.0012	mg/kg	8260B	11/29/05	1
Xylenes, Total	BDL	0.0036	mg/kg	8260B	11/29/05	1
Surrogate Recovery						
Toluene-d8	99.		% Rec.	8260B	11/29/05	1
Dibromofluoromethane	84.		% Rec.	8260B	11/29/05	1
4-Bromofluorobenzene	110		% Rec.	8260B	11/29/05	1

John Hawkins

John Hawkins, ESC Representative

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
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Reported: 11/29/05 14:13 Printed: 11/29/05 14:14

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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

November 29,2005

ESC Sample # : L223331-08

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Site ID : 3004 ELM, MCHENRY

Sample ID : BH-17 44FT

Project # : 1015-0001-02

Collected By : Kim Miller
Collection Date : 11/17/05 14:08

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	87.7		%	2540G	11/26/05	1
Volatile Organics						
Acetone	0.22	0.028	mg/kg	8260B	11/29/05	1
Acrolein	BDL	0.057	mg/kg	8260B	11/29/05	1
Acrylonitrile	BDL	0.011	mg/kg	8260B	11/29/05	1
Benzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Bromobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Bromodichloromethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
Bromoform	BDL	0.0011	mg/kg	8260B	11/29/05	1
Bromomethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
n-Butylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
sec-Butylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
tert-Butylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Carbon tetrachloride	BDL	0.0011	mg/kg	8260B	11/29/05	1
Carbon disulfide	BDL	0.0011	mg/kg	8260B	11/29/05	1
Chlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Chlorodibromomethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
Chloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
2-Chloroethyl vinyl ether	BDL	0.057	mg/kg	8260B	11/29/05	1
Chloroform	BDL	0.0057	mg/kg	8260B	11/29/05	1
Chloromethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
2-Chlorotoluene	BDL	0.0011	mg/kg	8260B	11/29/05	1
4-Chlorotoluene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2-Dibromo-3-Chloropropane	BDL	0.0023	mg/kg	8260B	11/29/05	1
1,2-Dibromoethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
Dibromomethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,3-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,4-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Dichlorodifluoromethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1-Dichloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2-Dichloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1-Dichloroethene	BDL	0.0011	mg/kg	8260B	11/29/05	1
cis-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	11/29/05	1
trans-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1-Dichloropropene	BDL	0.0011	mg/kg	8260B	11/29/05	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

November 29,2005

ESC Sample # : L223331-08

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Sample ID : BH-17 44FT

Collected By : Kim Miller
Collection Date : 11/17/05 14:08

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,3-Dichloropropane	BDL	0.0011	mg/kg	8260B	11/29/05	1
cis-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	11/29/05	1
trans-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	11/29/05	1
2,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	11/29/05	1
Di-isopropyl ether	BDL	0.0011	mg/kg	8260B	11/29/05	1
Ethylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Hexachlorobutadiene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Isopropylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
p-Isopropyltoluene	BDL	0.0011	mg/kg	8260B	11/29/05	1
2-Butanone (MEK)	BDL	0.011	mg/kg	8260B	11/29/05	1
Methylene Chloride	BDL	0.0057	mg/kg	8260B	11/29/05	1
4-Methyl-2-pentanone (MIBK)	BDL	0.011	mg/kg	8260B	11/29/05	1
2-Hexanone	BDL	0.011	mg/kg	8260B	11/29/05	1
Methyl tert-butyl ether	BDL	0.0011	mg/kg	8260B	11/29/05	1
Naphthalene	BDL	0.0057	mg/kg	8260B	11/29/05	1
n-Propylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Styrene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1,1,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1,2,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
Tetrachloroethene	0.014	0.0011	mg/kg	8260B	11/29/05	1
Toluene	BDL	0.0057	mg/kg	8260B	11/29/05	1
1,2,3-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2,4-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1,1-Trichloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1,2-Trichloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0011	mg/kg	8260B	11/29/05	1
Trichloroethene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Trichlorofluoromethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2,3-Trichloropropane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2,4-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,3,5-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Vinyl chloride	BDL	0.0011	mg/kg	8260B	11/29/05	1
Xylenes, Total	BDL	0.0034	mg/kg	8260B	11/29/05	1
Surrogate Recovery						
Toluene-d8	96.		% Rec.	8260B	11/29/05	1
Dibromofluoromethane	82.		% Rec.	8260B	11/29/05	1
4-Bromofluorobenzene	110		% Rec.	8260B	11/29/05	1

John Hawkins, ESC Representative

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

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Est. 1970

REPORT OF ANALYSIS

November 29,2005

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

ESC Sample # : L223331-09

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Site ID : 3004 ELM, MCHENRY

Sample ID : WC-1/2

Project # : 1015-0001-02

Collected By : Kim Miller
Collection Date : 11/17/05 10:55

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	89.5		%	2540G	11/26/05	1
Volatile Organics						
Acetone	0.21	0.028	mg/kg	8260B	11/29/05	1
Acrolein	BDL	0.056	mg/kg	8260B	11/29/05	1
Acrylonitrile	BDL	0.011	mg/kg	8260B	11/29/05	1
Benzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Bromobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Bromodichloromethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
Bromoform	BDL	0.0011	mg/kg	8260B	11/29/05	1
Bromomethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
n-Butylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
sec-Butylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
tert-Butylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Carbon tetrachloride	BDL	0.0011	mg/kg	8260B	11/29/05	1
Carbon disulfide	BDL	0.0011	mg/kg	8260B	11/29/05	1
Chlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Chlorodibromomethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
Chloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
2-Chloroethyl vinyl ether	BDL	0.056	mg/kg	8260B	11/29/05	1
Chloroform	BDL	0.0056	mg/kg	8260B	11/29/05	1
Chloromethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
2-Chlorotoluene	BDL	0.0011	mg/kg	8260B	11/29/05	1
4-Chlorotoluene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2-Dibromo-3-Chloropropane	BDL	0.0022	mg/kg	8260B	11/29/05	1
1,2-Dibromoethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
Dibromomethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,3-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,4-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Dichlorodifluoromethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1-Dichloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2-Dichloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1-Dichloroethene	BDL	0.0011	mg/kg	8260B	11/29/05	1
cis-1,2-Dichloroethene	0.0012	0.0011	mg/kg	8260B	11/29/05	1
trans-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1-Dichloropropene	BDL	0.0011	mg/kg	8260B	11/29/05	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

November 29, 2005

ESC Sample # : L223331-09

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Sample ID : WC-1/2

Collected By : Kim Miller
Collection Date : 11/17/05 10:55

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,3-Dichloropropane	BDL	0.0011	mg/kg	8260B	11/29/05	1
cis-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	11/29/05	1
trans-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	11/29/05	1
2,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	11/29/05	1
Di-isopropyl ether	BDL	0.0011	mg/kg	8260B	11/29/05	1
Ethylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Hexachlorobutadiene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Isopropylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
p-Isopropyltoluene	BDL	0.0011	mg/kg	8260B	11/29/05	1
2-Butanone (MEK)	BDL	0.011	mg/kg	8260B	11/29/05	1
Methylene Chloride	BDL	0.0056	mg/kg	8260B	11/29/05	1
4-Methyl-2-pentanone (MIBK)	BDL	0.011	mg/kg	8260B	11/29/05	1
2-Hexanone	BDL	0.011	mg/kg	8260B	11/29/05	1
Methyl tert-butyl ether	BDL	0.0011	mg/kg	8260B	11/29/05	1
Naphthalene	BDL	0.0056	mg/kg	8260B	11/29/05	1
n-Propylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Styrene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1,1,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1,2,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
Tetrachloroethene	0.046	0.0011	mg/kg	8260B	11/29/05	1
Toluene	BDL	0.0056	mg/kg	8260B	11/29/05	1
1,2,3-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2,4-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1,1-Trichloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1,2-Trichloroethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0011	mg/kg	8260B	11/29/05	1
Trichloroethene	0.0031	0.0011	mg/kg	8260B	11/29/05	1
Trichlorofluoromethane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2,3-Trichloropropane	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,2,4-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
1,3,5-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	11/29/05	1
Vinyl chloride	BDL	0.0011	mg/kg	8260B	11/29/05	1
Xylenes, Total	BDL	0.0034	mg/kg	8260B	11/29/05	1
Surrogate Recovery						
Toluene-d8	97.		% Rec.	8260B	11/29/05	1
Dibromofluoromethane	83.		% Rec.	8260B	11/29/05	1
4-Bromofluorobenzene	110		% Rec.	8260B	11/29/05	1

John Hawkins

John Hawkins, ESC Representative

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
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AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

The reported analytical results relate only to the sample submitted
Reported: 11/29/05 14:13 Printed: 11/29/05 14:14

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REPORT OF ANALYSIS

November 29,2005

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

ESC Sample # : L223331-10

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Site ID : 3004 ELM, MCHENRY

Sample ID : WC-3/4

Project # : 1015-0001-02

Collected By : Kim Miller
Collection Date : 11/17/05 14:14

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	88.2		%	2540G	11/26/05	1
Volatile Organics						
Acetone	7.3	1.8	mg/kg	8260B	11/29/05	64
Acrolein	BDL	3.6	mg/kg	8260B	11/29/05	64
Acrylonitrile	BDL	0.72	mg/kg	8260B	11/29/05	64
Benzene	BDL	0.072	mg/kg	8260B	11/29/05	64
Bromobenzene	BDL	0.072	mg/kg	8260B	11/29/05	64
Bromodichloromethane	BDL	0.072	mg/kg	8260B	11/29/05	64
Bromoform	BDL	0.072	mg/kg	8260B	11/29/05	64
Bromomethane	BDL	0.072	mg/kg	8260B	11/29/05	64
n-Butylbenzene	BDL	0.072	mg/kg	8260B	11/29/05	64
sec-Butylbenzene	BDL	0.072	mg/kg	8260B	11/29/05	64
tert-Butylbenzene	BDL	0.072	mg/kg	8260B	11/29/05	64
Carbon tetrachloride	BDL	0.072	mg/kg	8260B	11/29/05	64
Carbon disulfide	BDL	0.072	mg/kg	8260B	11/29/05	64
Chlorobenzene	BDL	0.072	mg/kg	8260B	11/29/05	64
Chlorodibromomethane	BDL	0.072	mg/kg	8260B	11/29/05	64
Chloroethane	BDL	0.072	mg/kg	8260B	11/29/05	64
2-Chloroethyl vinyl ether	BDL	3.6	mg/kg	8260B	11/29/05	64
Chloroform	BDL	0.36	mg/kg	8260B	11/29/05	64
Chloromethane	BDL	0.072	mg/kg	8260B	11/29/05	64
2-Chlorotoluene	BDL	0.072	mg/kg	8260B	11/29/05	64
4-Chlorotoluene	BDL	0.072	mg/kg	8260B	11/29/05	64
1,2-Dibromo-3-Chloropropane	BDL	0.14	mg/kg	8260B	11/29/05	64
1,2-Dibromoethane	BDL	0.072	mg/kg	8260B	11/29/05	64
Dibromomethane	BDL	0.072	mg/kg	8260B	11/29/05	64
1,2-Dichlorobenzene	BDL	0.072	mg/kg	8260B	11/29/05	64
1,3-Dichlorobenzene	BDL	0.072	mg/kg	8260B	11/29/05	64
1,4-Dichlorobenzene	BDL	0.072	mg/kg	8260B	11/29/05	64
Dichlorodifluoromethane	BDL	0.072	mg/kg	8260B	11/29/05	64
1,1-Dichloroethane	BDL	0.072	mg/kg	8260B	11/29/05	64
1,2-Dichloroethane	BDL	0.072	mg/kg	8260B	11/29/05	64
1,1-Dichloroethene	BDL	0.072	mg/kg	8260B	11/29/05	64
cis-1,2-Dichloroethene	0.14	0.072	mg/kg	8260B	11/29/05	64
trans-1,2-Dichloroethene	BDL	0.072	mg/kg	8260B	11/29/05	64
1,2-Dichloropropane	BDL	0.072	mg/kg	8260B	11/29/05	64
1,1-Dichloropropene	BDL	0.072	mg/kg	8260B	11/29/05	64

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

November 29,2005

ESC Sample # : L223331-10

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Date Received : November 21, 2005
Description : Soil and Groundwater Investigation

Sample ID : WC-3/4

Collected By : Kim Miller
Collection Date : 11/17/05 14:14

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,3-Dichloropropane	BDL	0.072	mg/kg	8260B	11/29/05	64
cis-1,3-Dichloropropene	BDL	0.072	mg/kg	8260B	11/29/05	64
trans-1,3-Dichloropropene	BDL	0.072	mg/kg	8260B	11/29/05	64
2,2-Dichloropropane	BDL	0.072	mg/kg	8260B	11/29/05	64
Di-isopropyl ether	BDL	0.072	mg/kg	8260B	11/29/05	64
Ethylbenzene	BDL	0.072	mg/kg	8260B	11/29/05	64
Hexachlorobutadiene	BDL	0.072	mg/kg	8260B	11/29/05	64
Isopropylbenzene	BDL	0.072	mg/kg	8260B	11/29/05	64
p-Isopropyltoluene	BDL	0.072	mg/kg	8260B	11/29/05	64
2-Butanone (MEK)	BDL	0.72	mg/kg	8260B	11/29/05	64
Methylene Chloride	BDL	0.36	mg/kg	8260B	11/29/05	64
4-Methyl-2-pentanone (MIBK)	BDL	0.72	mg/kg	8260B	11/29/05	64
2-Hexanone	BDL	0.72	mg/kg	8260B	11/29/05	64
Methyl tert-butyl ether	BDL	0.072	mg/kg	8260B	11/29/05	64
Naphthalene	BDL	0.36	mg/kg	8260B	11/29/05	64
n-Propylbenzene	BDL	0.072	mg/kg	8260B	11/29/05	64
Styrene	BDL	0.072	mg/kg	8260B	11/29/05	64
1,1,1,2-Tetrachloroethane	BDL	0.072	mg/kg	8260B	11/29/05	64
1,1,2,2-Tetrachloroethane	BDL	0.072	mg/kg	8260B	11/29/05	64
Tetrachloroethene	9.3	0.072	mg/kg	8260B	11/29/05	64
Toluene	BDL	0.36	mg/kg	8260B	11/29/05	64
1,2,3-Trichlorobenzene	BDL	0.072	mg/kg	8260B	11/29/05	64
1,2,4-Trichlorobenzene	BDL	0.072	mg/kg	8260B	11/29/05	64
1,1,1-Trichloroethane	BDL	0.072	mg/kg	8260B	11/29/05	64
1,1,2-Trichloroethane	BDL	0.072	mg/kg	8260B	11/29/05	64
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.072	mg/kg	8260B	11/29/05	64
Trichloroethene	0.40	0.072	mg/kg	8260B	11/29/05	64
Trichlorofluoromethane	BDL	0.072	mg/kg	8260B	11/29/05	64
1,2,3-Trichloropropane	BDL	0.072	mg/kg	8260B	11/29/05	64
1,2,4-Trimethylbenzene	BDL	0.072	mg/kg	8260B	11/29/05	64
1,3,5-Trimethylbenzene	BDL	0.072	mg/kg	8260B	11/29/05	64
Vinyl chloride	BDL	0.072	mg/kg	8260B	11/29/05	64
Xylenes, Total	BDL	0.22	mg/kg	8260B	11/29/05	64
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	11/29/05	64
Dibromofluoromethane	81.		% Rec.	8260B	11/29/05	64
4-Bromofluorobenzene	100		% Rec.	8260B	11/29/05	64

John Hawkins, ESC Representative

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
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Reported: 11/29/05 14:13 Printed: 11/29/05 14:14

Attachment A
List of Analytes with QC Qualifiers

Sample #	Analyte	Qualifier
L223331-01	Acrolein	J4
	Tetrachloroethene	E
L223331-02	Acrolein	J4
	tert-Butylbenzene	J4
	2-Chloroethyl vinyl ether	J3
	4-Chlorotoluene	J4
	1,3-Dichlorobenzene	J4
	Hexachlorobutadiene	J4
	p-Isopropyltoluene	J4
	Tetrachloroethene	J4E
	1,2,4-Trichlorobenzene	J4
	1,3,5-Trimethylbenzene	J4
L223331-03	Acrolein	J4
	tert-Butylbenzene	J4
	2-Chloroethyl vinyl ether	J3
	4-Chlorotoluene	J4
	1,3-Dichlorobenzene	J4
	Hexachlorobutadiene	J4
	p-Isopropyltoluene	J4
	Tetrachloroethene	J4E
	1,2,4-Trichlorobenzene	J4
	1,3,5-Trimethylbenzene	J4
L223331-04	Acrolein	J4
	1,2-Dibromo-3-Chloropropane	J3
	cis-1,2-Dichloroethene	E
	Naphthalene	J3
	Tetrachloroethene	J4
	1,2,3-Trichlorobenzene	J3
L223331-05	Acetone	E
	Acrolein	J4
	1,2-Dibromo-3-Chloropropane	J3
	Naphthalene	J3
	Tetrachloroethene	J4
	1,2,3-Trichlorobenzene	J3
L223331-06	Acrolein	J4
	2-Chloroethyl vinyl ether	J3
	1,2-Dibromo-3-Chloropropane	J3
	Hexachlorobutadiene	J4
	p-Isopropyltoluene	J4
	Naphthalene	J3
	Tetrachloroethene	E
	1,2,3-Trichlorobenzene	J3
L223331-07	Acetone	E
	Acrolein	J4
	1,2-Dibromo-3-Chloropropane	J3
	Naphthalene	J3
	Tetrachloroethene	J4
	1,2,3-Trichlorobenzene	J3
L223331-08	Acrolein	J4
	1,2-Dibromo-3-Chloropropane	J3
	Naphthalene	J3
	Tetrachloroethene	J4
	1,2,3-Trichlorobenzene	J3
L223331-09	Acrolein	J4
	1,2-Dibromo-3-Chloropropane	J3
	Naphthalene	J3
	Tetrachloroethene	J4
	1,2,3-Trichlorobenzene	J3
L223331-10	Acrolein	J4
	1,2-Dibromo-3-Chloropropane	J3
	Naphthalene	J3
	Tetrachloroethene	EJ4
	1,2,3-Trichlorobenzene	J3

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
E	GTL (EPA) - Greater than upper calibration limit: Actual value is known to be greater than the upper calibration range.
J4	The associated batch QC was outside the established quality control range for accuracy.
J3	The associated batch QC was outside the established quality control range for precision.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

	Control Limits					(AQ)	(SS)
2-Fluorophenol	31-119	Nitrobenzene-d5	43-118	Dibromfluoromethane		68-128	64-125
Phenol-d5	12-134	2-Fluorobiphenyl	45-128	Toluene-d8		76-115	69-118
2,4,6-Tribromophenol	51-141	Terphenyl-d14	43-137	4-Bromofluorobenzene		79-127	61-134

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
11/29/05 at 14:14:17

TSR Signing Reports: 341

Sample: L223331-01 Account: MILBUTHIL Received: 11/21/05 09:00 Due Date: 11/29/05 00:00 RPT Date: 11/29/05 14:13

Sample: L223331-02 Account: MILBUTHIL Received: 11/21/05 09:00 Due Date: 11/29/05 00:00 RPT Date: 11/29/05 14:13

Sample: L223331-03 Account: MILBUTHIL Received: 11/21/05 09:00 Due Date: 11/29/05 00:00 RPT Date: 11/29/05 14:13

Sample: L223331-04 Account: MILBUTHIL Received: 11/21/05 09:00 Due Date: 11/29/05 00:00 RPT Date: 11/29/05 14:13

Sample: L223331-05 Account: MILBUTHIL Received: 11/21/05 09:00 Due Date: 11/29/05 00:00 RPT Date: 11/29/05 14:13

Sample: L223331-06 Account: MILBUTHIL Received: 11/21/05 09:00 Due Date: 11/29/05 00:00 RPT Date: 11/29/05 14:13

Sample: L223331-07 Account: MILBUTHIL Received: 11/21/05 09:00 Due Date: 11/29/05 00:00 RPT Date: 11/29/05 14:13

Sample: L223331-08 Account: MILBUTHIL Received: 11/21/05 09:00 Due Date: 11/29/05 00:00 RPT Date: 11/29/05 14:13

Sample: L223331-09 Account: MILBUTHIL Received: 11/21/05 09:00 Due Date: 11/29/05 00:00 RPT Date: 11/29/05 14:13

Sample: L223331-10 Account: MILBUTHIL Received: 11/21/05 09:00 Due Date: 11/29/05 00:00 RPT Date: 11/29/05 14:13

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Est. 1970

REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

January 27, 2006

Date Received : January 21, 2006
Description : Soil and Groundwater Investigation

Sample ID : MW-1

Collected By : Michael Butler
Collection Date : 01/19/06 09:50

ESC Sample # : L230627-01

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	0.025	mg/l	8260B	01/22/06	1
Acrolein	BDL	0.050	mg/l	8260B	01/22/06	1
Acrylonitrile	BDL	0.010	mg/l	8260B	01/22/06	1
Benzene	BDL	0.0010	mg/l	8260B	01/22/06	1
Bromobenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	01/22/06	1
Bromoform	BDL	0.0010	mg/l	8260B	01/22/06	1
Bromomethane	BDL	0.0010	mg/l	8260B	01/22/06	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	01/22/06	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	01/22/06	1
Chloroethane	BDL	0.0010	mg/l	8260B	01/22/06	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	01/22/06	1
Chloroform	BDL	0.0050	mg/l	8260B	01/22/06	1
Chloromethane	BDL	0.0010	mg/l	8260B	01/22/06	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	01/22/06	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,2-Dibromo-3-Chloropropane	BDL	0.0020	mg/l	8260B	01/22/06	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	01/22/06	1
Dibromomethane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
Dichlorodifluoromethane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	01/22/06	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	01/22/06	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	01/22/06	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	01/22/06	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	01/22/06	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

January 27, 2006

Date Received : January 21, 2006
Description : Soil and Groundwater Investigation

Sample ID : MW-1

Collected By : Michael Butler
Collection Date : 01/19/06 09:50

ESC Sample # : L230627-01

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	01/22/06	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	01/22/06	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
Hexachlorobutadiene	BDL	0.0010	mg/l	8260B	01/22/06	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	01/22/06	1
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	01/22/06	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	01/22/06	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	01/22/06	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	01/22/06	1
Naphthalene	BDL	0.0050	mg/l	8260B	01/22/06	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
Styrene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/l	8260B	01/22/06	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	01/22/06	1
Toluene	BDL	0.0050	mg/l	8260B	01/22/06	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	01/22/06	1
Trichloroethene	BDL	0.0010	mg/l	8260B	01/22/06	1
Trichlorofluoromethane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,2,3-Trichloropropane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,2,3-Trimethylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	01/22/06	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	01/22/06	1
Surrogate Recovery						
Toluene-d8	99.		% Rec.	8260B	01/22/06	1
Dibromofluoromethane	110		% Rec.	8260B	01/22/06	1
4-Bromofluorobenzene	96.		% Rec.	8260B	01/22/06	1

John Hawkins, ESC Representative

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

Note:
The reported analytical results relate only to the sample submitted.

Reported: 01/27/06 10:22 Printed: 01/27/06 10:23

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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

January 27, 2006

Date Received : January 21, 2006
Description : Soil and Groundwater Investigation

Sample ID : MW-6

Collected By : Michael Butler
Collection Date : 01/19/06 10:12

ESC Sample # : L230627-02

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	0.025	mg/l	8260B	01/22/06	1
Acrolein	BDL	0.050	mg/l	8260B	01/22/06	1
Acrylonitrile	BDL	0.010	mg/l	8260B	01/22/06	1
Benzene	BDL	0.0010	mg/l	8260B	01/22/06	1
Bromobenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	01/22/06	1
Bromoform	BDL	0.0010	mg/l	8260B	01/22/06	1
Bromomethane	BDL	0.0010	mg/l	8260B	01/22/06	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	01/22/06	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	01/22/06	1
Chloroethane	BDL	0.0010	mg/l	8260B	01/22/06	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	01/22/06	1
Chloroform	BDL	0.0050	mg/l	8260B	01/22/06	1
Chloromethane	BDL	0.0010	mg/l	8260B	01/22/06	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	01/22/06	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,2-Dibromo-3-Chloropropane	BDL	0.0020	mg/l	8260B	01/22/06	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	01/22/06	1
Dibromomethane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
Dichlorodifluoromethane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	01/22/06	1
cis-1,2-Dichloroethene	0.023	0.0010	mg/l	8260B	01/22/06	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	01/22/06	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	01/22/06	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	01/22/06	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

January 27, 2006

Date Received : January 21, 2006
Description : Soil and Groundwater Investigation

Sample ID : MW-6

Collected By : Michael Butler
Collection Date : 01/19/06 10:12

ESC Sample # : L230627-02

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	01/22/06	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	01/22/06	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
Hexachlorobutadiene	BDL	0.0010	mg/l	8260B	01/22/06	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	01/22/06	1
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	01/22/06	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	01/22/06	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	01/22/06	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	01/22/06	1
Naphthalene	BDL	0.0050	mg/l	8260B	01/22/06	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
Styrene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/l	8260B	01/22/06	1
Tetrachloroethene	0.0020	0.0010	mg/l	8260B	01/22/06	1
Toluene	BDL	0.0050	mg/l	8260B	01/22/06	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	01/22/06	1
Trichloroethene	0.011	0.0010	mg/l	8260B	01/22/06	1
Trichlorofluoromethane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,2,3-Trichloropropane	BDL	0.0010	mg/l	8260B	01/22/06	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,2,3-Trimethylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	01/22/06	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	01/22/06	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	01/22/06	1
Surrogate Recovery						
Toluene-d8	97.		% Rec.	8260B	01/22/06	1
Dibromofluoromethane	110		% Rec.	8260B	01/22/06	1
4-Bromofluorobenzene	93.		% Rec.	8260B	01/22/06	1

John Hawkins

John Hawkins, ESC Representative

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

Note:
The reported analytical results relate only to the sample submitted.

Reported: 01/27/06 10:22 Printed: 01/27/06 10:23

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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

January 27, 2006

Date Received : January 21, 2006
Description : Soil and Groundwater Investigation

Sample ID : MW-3

Collected By : Michael Butler
Collection Date : 01/19/06 09:55

ESC Sample # : L230627-03

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	0.12	mg/l	8260B	01/22/06	5
Acrolein	BDL	0.25	mg/l	8260B	01/22/06	5
Acrylonitrile	BDL	0.050	mg/l	8260B	01/22/06	5
Benzene	BDL	0.0050	mg/l	8260B	01/22/06	5
Bromobenzene	BDL	0.0050	mg/l	8260B	01/22/06	5
Bromodichloromethane	BDL	0.0050	mg/l	8260B	01/22/06	5
Bromoform	BDL	0.0050	mg/l	8260B	01/22/06	5
Bromomethane	BDL	0.0050	mg/l	8260B	01/22/06	5
n-Butylbenzene	BDL	0.0050	mg/l	8260B	01/22/06	5
sec-Butylbenzene	BDL	0.0050	mg/l	8260B	01/22/06	5
tert-Butylbenzene	BDL	0.0050	mg/l	8260B	01/22/06	5
Carbon tetrachloride	BDL	0.0050	mg/l	8260B	01/22/06	5
Chlorobenzene	BDL	0.0050	mg/l	8260B	01/22/06	5
Chlorodibromomethane	BDL	0.0050	mg/l	8260B	01/22/06	5
Chloroethane	BDL	0.0050	mg/l	8260B	01/22/06	5
2-Chloroethyl vinyl ether	BDL	0.25	mg/l	8260B	01/22/06	5
Chloroform	BDL	0.025	mg/l	8260B	01/22/06	5
Chloromethane	BDL	0.0050	mg/l	8260B	01/22/06	5
2-Chlorotoluene	BDL	0.0050	mg/l	8260B	01/22/06	5
4-Chlorotoluene	BDL	0.0050	mg/l	8260B	01/22/06	5
1,2-Dibromo-3-Chloropropane	BDL	0.010	mg/l	8260B	01/22/06	5
1,2-Dibromoethane	BDL	0.0050	mg/l	8260B	01/22/06	5
Dibromomethane	BDL	0.0050	mg/l	8260B	01/22/06	5
1,2-Dichlorobenzene	BDL	0.0050	mg/l	8260B	01/22/06	5
1,3-Dichlorobenzene	BDL	0.0050	mg/l	8260B	01/22/06	5
1,4-Dichlorobenzene	BDL	0.0050	mg/l	8260B	01/22/06	5
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	01/22/06	5
1,1-Dichloroethane	BDL	0.0050	mg/l	8260B	01/22/06	5
1,2-Dichloroethane	BDL	0.0050	mg/l	8260B	01/22/06	5
1,1-Dichloroethene	BDL	0.0050	mg/l	8260B	01/22/06	5
cis-1,2-Dichloroethene	0.61	0.0050	mg/l	8260B	01/22/06	5
trans-1,2-Dichloroethene	BDL	0.0050	mg/l	8260B	01/22/06	5
1,2-Dichloropropane	BDL	0.0050	mg/l	8260B	01/22/06	5
1,1-Dichloropropene	BDL	0.0050	mg/l	8260B	01/22/06	5
1,3-Dichloropropane	BDL	0.0050	mg/l	8260B	01/22/06	5
cis-1,3-Dichloropropene	BDL	0.0050	mg/l	8260B	01/22/06	5
trans-1,3-Dichloropropene	BDL	0.0050	mg/l	8260B	01/22/06	5

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

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Est. 1970

REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

January 27, 2006

Date Received : January 21, 2006
Description : Soil and Groundwater Investigation

Sample ID : MW-3

Collected By : Michael Butler
Collection Date : 01/19/06 09:55

ESC Sample # : L230627-03

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2,2-Dichloropropane	BDL	0.0050	mg/l	8260B	01/22/06	5
Di-isopropyl ether	BDL	0.0050	mg/l	8260B	01/22/06	5
Ethylbenzene	BDL	0.0050	mg/l	8260B	01/22/06	5
Hexachlorobutadiene	BDL	0.0050	mg/l	8260B	01/22/06	5
Isopropylbenzene	BDL	0.0050	mg/l	8260B	01/22/06	5
p-Isopropyltoluene	BDL	0.0050	mg/l	8260B	01/22/06	5
2-Butanone (MEK)	BDL	0.050	mg/l	8260B	01/22/06	5
Methylene Chloride	BDL	0.025	mg/l	8260B	01/22/06	5
4-Methyl-2-pentanone (MIBK)	BDL	0.050	mg/l	8260B	01/22/06	5
Methyl tert-butyl ether	BDL	0.0050	mg/l	8260B	01/22/06	5
Naphthalene	BDL	0.025	mg/l	8260B	01/22/06	5
n-Propylbenzene	BDL	0.0050	mg/l	8260B	01/22/06	5
Styrene	BDL	0.0050	mg/l	8260B	01/22/06	5
1,1,1,2-Tetrachloroethane	BDL	0.0050	mg/l	8260B	01/22/06	5
1,1,2,2-Tetrachloroethane	BDL	0.0050	mg/l	8260B	01/22/06	5
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0050	mg/l	8260B	01/22/06	5
Tetrachloroethene	3.0	0.0050	mg/l	8260B	01/22/06	5
Toluene	BDL	0.025	mg/l	8260B	01/22/06	5
1,2,3-Trichlorobenzene	BDL	0.0050	mg/l	8260B	01/22/06	5
1,2,4-Trichlorobenzene	BDL	0.0050	mg/l	8260B	01/22/06	5
1,1,1-Trichloroethane	BDL	0.0050	mg/l	8260B	01/22/06	5
1,1,2-Trichloroethane	BDL	0.0050	mg/l	8260B	01/22/06	5
Trichloroethene	0.61	0.0050	mg/l	8260B	01/22/06	5
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	01/22/06	5
1,2,3-Trichloropropane	BDL	0.0050	mg/l	8260B	01/22/06	5
1,2,4-Trimethylbenzene	BDL	0.0050	mg/l	8260B	01/22/06	5
1,2,3-Trimethylbenzene	BDL	0.0050	mg/l	8260B	01/22/06	5
1,3,5-Trimethylbenzene	BDL	0.0050	mg/l	8260B	01/22/06	5
Vinyl chloride	0.0076	0.0050	mg/l	8260B	01/22/06	5
Xylenes, Total	BDL	0.015	mg/l	8260B	01/22/06	5
Surrogate Recovery						
Toluene-d8	98.		% Rec.	8260B	01/22/06	5
Dibromofluoromethane	110		% Rec.	8260B	01/22/06	5
4-Bromofluorobenzene	95.		% Rec.	8260B	01/22/06	5

John Hawkins

John Hawkins, ESC Representative

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

Note:
The reported analytical results relate only to the sample submitted.

Reported: 01/27/06 10:22 Printed: 01/27/06 10:23

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Est. 1970

REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

January 27, 2006

Date Received : January 21, 2006
Description : Soil and Groundwater Investigation

Sample ID : MW-4

Collected By : Michael Butler
Collection Date : 01/19/06 10:23

ESC Sample # : L230627-04

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	6.2	mg/l	8260B	01/26/06	250
Acrolein	BDL	12.	mg/l	8260B	01/26/06	250
Acrylonitrile	BDL	2.5	mg/l	8260B	01/26/06	250
Benzene	BDL	0.25	mg/l	8260B	01/26/06	250
Bromobenzene	BDL	0.25	mg/l	8260B	01/26/06	250
Bromodichloromethane	BDL	0.25	mg/l	8260B	01/26/06	250
Bromoform	BDL	0.25	mg/l	8260B	01/26/06	250
Bromomethane	BDL	0.25	mg/l	8260B	01/26/06	250
n-Butylbenzene	BDL	0.25	mg/l	8260B	01/26/06	250
sec-Butylbenzene	BDL	0.25	mg/l	8260B	01/26/06	250
tert-Butylbenzene	BDL	0.25	mg/l	8260B	01/26/06	250
Carbon tetrachloride	BDL	0.25	mg/l	8260B	01/26/06	250
Chlorobenzene	BDL	0.25	mg/l	8260B	01/26/06	250
Chlorodibromomethane	BDL	0.25	mg/l	8260B	01/26/06	250
Chloroethane	BDL	0.25	mg/l	8260B	01/26/06	250
2-Chloroethyl vinyl ether	BDL	12.	mg/l	8260B	01/26/06	250
Chloroform	BDL	1.2	mg/l	8260B	01/26/06	250
Chloromethane	BDL	0.25	mg/l	8260B	01/26/06	250
2-Chlorotoluene	BDL	0.25	mg/l	8260B	01/26/06	250
4-Chlorotoluene	BDL	0.25	mg/l	8260B	01/26/06	250
1,2-Dibromo-3-Chloropropane	BDL	0.50	mg/l	8260B	01/26/06	250
1,2-Dibromoethane	BDL	0.25	mg/l	8260B	01/26/06	250
Dibromomethane	BDL	0.25	mg/l	8260B	01/26/06	250
1,2-Dichlorobenzene	BDL	0.25	mg/l	8260B	01/26/06	250
1,3-Dichlorobenzene	BDL	0.25	mg/l	8260B	01/26/06	250
1,4-Dichlorobenzene	BDL	0.25	mg/l	8260B	01/26/06	250
Dichlorodifluoromethane	BDL	0.25	mg/l	8260B	01/26/06	250
1,1-Dichloroethane	BDL	0.25	mg/l	8260B	01/26/06	250
1,2-Dichloroethane	BDL	0.25	mg/l	8260B	01/26/06	250
1,1-Dichloroethene	BDL	0.25	mg/l	8260B	01/26/06	250
cis-1,2-Dichloroethene	8.0	0.25	mg/l	8260B	01/26/06	250
trans-1,2-Dichloroethene	BDL	0.25	mg/l	8260B	01/26/06	250
1,2-Dichloropropane	BDL	0.25	mg/l	8260B	01/26/06	250
1,1-Dichloropropene	BDL	0.25	mg/l	8260B	01/26/06	250
1,3-Dichloropropane	BDL	0.25	mg/l	8260B	01/26/06	250
cis-1,3-Dichloropropene	BDL	0.25	mg/l	8260B	01/26/06	250
trans-1,3-Dichloropropene	BDL	0.25	mg/l	8260B	01/26/06	250

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

January 27, 2006

Date Received : January 21, 2006
Description : Soil and Groundwater Investigation

ESC Sample # : L230627-04

Site ID : 3004 ELM, MCHENRY

Sample ID : MW-4

Project # : 1015-0001-02

Collected By : Michael Butler
Collection Date : 01/19/06 10:23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2,2-Dichloropropane	BDL	0.25	mg/l	8260B	01/26/06	250
Di-isopropyl ether	BDL	0.25	mg/l	8260B	01/26/06	250
Ethylbenzene	BDL	0.25	mg/l	8260B	01/26/06	250
Hexachlorobutadiene	BDL	0.25	mg/l	8260B	01/26/06	250
Isopropylbenzene	BDL	0.25	mg/l	8260B	01/26/06	250
p-Isopropyltoluene	BDL	0.25	mg/l	8260B	01/26/06	250
2-Butanone (MEK)	BDL	2.5	mg/l	8260B	01/26/06	250
Methylene Chloride	BDL	1.2	mg/l	8260B	01/26/06	250
4-Methyl-2-pentanone (MIBK)	BDL	2.5	mg/l	8260B	01/26/06	250
Methyl tert-butyl ether	BDL	0.25	mg/l	8260B	01/26/06	250
Naphthalene	BDL	1.2	mg/l	8260B	01/26/06	250
n-Propylbenzene	BDL	0.25	mg/l	8260B	01/26/06	250
Styrene	BDL	0.25	mg/l	8260B	01/26/06	250
1,1,1,2-Tetrachloroethane	BDL	0.25	mg/l	8260B	01/26/06	250
1,1,2,2-Tetrachloroethane	BDL	0.25	mg/l	8260B	01/26/06	250
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.25	mg/l	8260B	01/26/06	250
Tetrachloroethene	BDL	0.25	mg/l	8260B	01/26/06	250
Toluene	BDL	1.2	mg/l	8260B	01/26/06	250
1,2,3-Trichlorobenzene	BDL	0.25	mg/l	8260B	01/26/06	250
1,2,4-Trichlorobenzene	BDL	0.25	mg/l	8260B	01/26/06	250
1,1,1-Trichloroethane	BDL	0.25	mg/l	8260B	01/26/06	250
1,1,2-Trichloroethane	BDL	0.25	mg/l	8260B	01/26/06	250
Trichloroethene	BDL	0.25	mg/l	8260B	01/26/06	250
Trichlorofluoromethane	BDL	0.25	mg/l	8260B	01/26/06	250
1,2,3-Trichloropropane	BDL	0.25	mg/l	8260B	01/26/06	250
1,2,4-Trimethylbenzene	BDL	0.25	mg/l	8260B	01/26/06	250
1,2,3-Trimethylbenzene	BDL	0.25	mg/l	8260B	01/26/06	250
1,3,5-Trimethylbenzene	BDL	0.25	mg/l	8260B	01/26/06	250
Vinyl chloride	3.4	0.25	mg/l	8260B	01/26/06	250
Xylenes, Total	BDL	0.75	mg/l	8260B	01/26/06	250
Surrogate Recovery						
Toluene-d8	86.		% Rec.	8260B	01/26/06	250
Dibromofluoromethane	100		% Rec.	8260B	01/26/06	250
4-Bromofluorobenzene	74.		% Rec.	8260B	01/26/06	250

John Hawkins

John Hawkins, ESC Representative

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

Note:
The reported analytical results relate only to the sample submitted.

Reported: 01/27/06 10:22 Printed: 01/27/06 10:23

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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

January 27, 2006

Date Received : January 21, 2006
Description : Soil and Groundwater Investigation

Sample ID : MW-5

Collected By : Michael Butler
Collection Date : 01/19/06 10:17

ESC Sample # : L230627-05

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	0.62	mg/l	8260B	01/22/06	25
Acrolein	BDL	1.2	mg/l	8260B	01/22/06	25
Acrylonitrile	BDL	0.25	mg/l	8260B	01/22/06	25
Benzene	BDL	0.025	mg/l	8260B	01/22/06	25
Bromobenzene	BDL	0.025	mg/l	8260B	01/22/06	25
Bromodichloromethane	BDL	0.025	mg/l	8260B	01/22/06	25
Bromoform	BDL	0.025	mg/l	8260B	01/22/06	25
Bromomethane	BDL	0.025	mg/l	8260B	01/22/06	25
n-Butylbenzene	BDL	0.025	mg/l	8260B	01/22/06	25
sec-Butylbenzene	BDL	0.025	mg/l	8260B	01/22/06	25
tert-Butylbenzene	BDL	0.025	mg/l	8260B	01/22/06	25
Carbon tetrachloride	BDL	0.025	mg/l	8260B	01/22/06	25
Chlorobenzene	BDL	0.025	mg/l	8260B	01/22/06	25
Chlorodibromomethane	BDL	0.025	mg/l	8260B	01/22/06	25
Chloroethane	BDL	0.025	mg/l	8260B	01/22/06	25
2-Chloroethyl vinyl ether	BDL	1.2	mg/l	8260B	01/22/06	25
Chloroform	BDL	0.12	mg/l	8260B	01/22/06	25
Chloromethane	BDL	0.025	mg/l	8260B	01/22/06	25
2-Chlorotoluene	BDL	0.025	mg/l	8260B	01/22/06	25
4-Chlorotoluene	BDL	0.025	mg/l	8260B	01/22/06	25
1,2-Dibromo-3-Chloropropane	BDL	0.050	mg/l	8260B	01/22/06	25
1,2-Dibromoethane	BDL	0.025	mg/l	8260B	01/22/06	25
Dibromomethane	BDL	0.025	mg/l	8260B	01/22/06	25
1,2-Dichlorobenzene	BDL	0.025	mg/l	8260B	01/22/06	25
1,3-Dichlorobenzene	BDL	0.025	mg/l	8260B	01/22/06	25
1,4-Dichlorobenzene	BDL	0.025	mg/l	8260B	01/22/06	25
Dichlorodifluoromethane	BDL	0.025	mg/l	8260B	01/22/06	25
1,1-Dichloroethane	BDL	0.025	mg/l	8260B	01/22/06	25
1,2-Dichloroethane	BDL	0.025	mg/l	8260B	01/22/06	25
1,1-Dichloroethene	BDL	0.025	mg/l	8260B	01/22/06	25
cis-1,2-Dichloroethene	1.7	0.025	mg/l	8260B	01/22/06	25
trans-1,2-Dichloroethene	BDL	0.025	mg/l	8260B	01/22/06	25
1,2-Dichloropropane	BDL	0.025	mg/l	8260B	01/22/06	25
1,1-Dichloropropene	BDL	0.025	mg/l	8260B	01/22/06	25
1,3-Dichloropropane	BDL	0.025	mg/l	8260B	01/22/06	25
cis-1,3-Dichloropropene	BDL	0.025	mg/l	8260B	01/22/06	25
trans-1,3-Dichloropropene	BDL	0.025	mg/l	8260B	01/22/06	25

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
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REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

January 27, 2006

ESC Sample # : L230627-05

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Date Received : January 21, 2006
Description : Soil and Groundwater Investigation

Sample ID : MW-5

Collected By : Michael Butler
Collection Date : 01/19/06 10:17

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2,2-Dichloropropane	BDL	0.025	mg/l	8260B	01/22/06	25
Di-isopropyl ether	BDL	0.025	mg/l	8260B	01/22/06	25
Ethylbenzene	BDL	0.025	mg/l	8260B	01/22/06	25
Hexachlorobutadiene	BDL	0.025	mg/l	8260B	01/22/06	25
Isopropylbenzene	BDL	0.025	mg/l	8260B	01/22/06	25
p-Isopropyltoluene	BDL	0.025	mg/l	8260B	01/22/06	25
2-Butanone (MEK)	BDL	0.25	mg/l	8260B	01/22/06	25
Methylene Chloride	BDL	0.12	mg/l	8260B	01/22/06	25
4-Methyl-2-pentanone (MIBK)	BDL	0.25	mg/l	8260B	01/22/06	25
Methyl tert-butyl ether	BDL	0.025	mg/l	8260B	01/22/06	25
Naphthalene	BDL	0.12	mg/l	8260B	01/22/06	25
n-Propylbenzene	BDL	0.025	mg/l	8260B	01/22/06	25
Styrene	BDL	0.025	mg/l	8260B	01/22/06	25
1,1,1,2-Tetrachloroethane	BDL	0.025	mg/l	8260B	01/22/06	25
1,1,2,2-Tetrachloroethane	BDL	0.025	mg/l	8260B	01/22/06	25
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.025	mg/l	8260B	01/22/06	25
Tetrachloroethene	15.	0.025	mg/l	8260B	01/22/06	25
Toluene	BDL	0.12	mg/l	8260B	01/22/06	25
1,2,3-Trichlorobenzene	BDL	0.025	mg/l	8260B	01/22/06	25
1,2,4-Trichlorobenzene	BDL	0.025	mg/l	8260B	01/22/06	25
1,1,1-Trichloroethane	BDL	0.025	mg/l	8260B	01/22/06	25
1,1,2-Trichloroethane	BDL	0.025	mg/l	8260B	01/22/06	25
Trichloroethene	2.6	0.025	mg/l	8260B	01/22/06	25
Trichlorofluoromethane	BDL	0.025	mg/l	8260B	01/22/06	25
1,2,3-Trichloropropane	BDL	0.025	mg/l	8260B	01/22/06	25
1,2,4-Trimethylbenzene	BDL	0.025	mg/l	8260B	01/22/06	25
1,2,3-Trimethylbenzene	BDL	0.025	mg/l	8260B	01/22/06	25
1,3,5-Trimethylbenzene	BDL	0.025	mg/l	8260B	01/22/06	25
Vinyl chloride	BDL	0.025	mg/l	8260B	01/22/06	25
Xylenes, Total	BDL	0.075	mg/l	8260B	01/22/06	25
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	01/22/06	25
Dibromofluoromethane	110		% Rec.	8260B	01/22/06	25
4-Bromofluorobenzene	96.		% Rec.	8260B	01/22/06	25

John Hawkins

John Hawkins, ESC Representative

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - 81002, WI - 998093910

Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/27/06 10:22 Printed: 01/27/06 10:23

ENVIRONMENTAL SCIENCE CORP.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

January 27, 2006

ESC Sample # : L230627-06

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Date Received : January 21, 2006
Description : Soil and Groundwater Investigation

Sample ID : MW-7

Collected By : Michael Butler
Collection Date : 01/19/06 10:05

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	0.025	mg/l	8260B	01/26/06	1
Acrolein	BDL	0.050	mg/l	8260B	01/26/06	1
Acrylonitrile	BDL	0.010	mg/l	8260B	01/26/06	1
Benzene	BDL	0.0010	mg/l	8260B	01/26/06	1
Bromobenzene	BDL	0.0010	mg/l	8260B	01/26/06	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	01/26/06	1
Bromoform	BDL	0.0010	mg/l	8260B	01/26/06	1
Bromomethane	BDL	0.0010	mg/l	8260B	01/26/06	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	01/26/06	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	01/26/06	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	01/26/06	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	01/26/06	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	01/26/06	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	01/26/06	1
Chloroethane	BDL	0.0010	mg/l	8260B	01/26/06	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	01/26/06	1
Chloroform	BDL	0.0050	mg/l	8260B	01/26/06	1
Chloromethane	BDL	0.0010	mg/l	8260B	01/26/06	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	01/26/06	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	01/26/06	1
1,2-Dibromo-3-Chloropropane	BDL	0.0020	mg/l	8260B	01/26/06	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	01/26/06	1
Dibromomethane	BDL	0.0010	mg/l	8260B	01/26/06	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	01/26/06	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	01/26/06	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	01/26/06	1
Dichlorodifluoromethane	BDL	0.0010	mg/l	8260B	01/26/06	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	01/26/06	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	01/26/06	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	01/26/06	1
cis-1,2-Dichloroethene	0.010	0.0010	mg/l	8260B	01/26/06	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	01/26/06	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	01/26/06	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	01/26/06	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	01/26/06	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	01/26/06	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	01/26/06	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Michael E. Butler
Miller - Butler Environmental Consu
1288 Saint Johns Avenue
Highland Park, IL 60035

January 27, 2006

ESC Sample # : L230627-06

Site ID : 3004 ELM, MCHENRY

Project # : 1015-0001-02

Date Received : January 21, 2006
Description : Soil and Groundwater Investigation

Sample ID : MW-7

Collected By : Michael Butler
Collection Date : 01/19/06 10:05

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	01/26/06	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	01/26/06	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	01/26/06	1
Hexachlorobutadiene	BDL	0.0010	mg/l	8260B	01/26/06	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	01/26/06	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	01/26/06	1
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	01/26/06	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	01/26/06	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	01/26/06	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	01/26/06	1
Naphthalene	BDL	0.0050	mg/l	8260B	01/26/06	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	01/26/06	1
Styrene	BDL	0.0010	mg/l	8260B	01/26/06	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	01/26/06	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	01/26/06	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/l	8260B	01/26/06	1
Tetrachloroethene	0.011	0.0010	mg/l	8260B	01/26/06	1
Toluene	BDL	0.0050	mg/l	8260B	01/26/06	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	01/26/06	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	01/26/06	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	01/26/06	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	01/26/06	1
Trichloroethene	0.025	0.0010	mg/l	8260B	01/26/06	1
Trichlorofluoromethane	BDL	0.0010	mg/l	8260B	01/26/06	1
1,2,3-Trichloropropane	BDL	0.0010	mg/l	8260B	01/26/06	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	01/26/06	1
1,2,3-Trimethylbenzene	BDL	0.0010	mg/l	8260B	01/26/06	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	01/26/06	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	01/26/06	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	01/26/06	1
Surrogate Recovery						
Toluene-d8	86.		% Rec.	8260B	01/26/06	1
Dibromofluoromethane	100		% Rec.	8260B	01/26/06	1
4-Bromofluorobenzene	75.		% Rec.	8260B	01/26/06	1

John Hawkins

John Hawkins, ESC Representative

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
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Note:
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Reported: 01/27/06 10:22 Printed: 01/27/06 10:23

Attachment A
List of Analytes with QC Qualifiers

Sample #	Analyte	Qualifier
L230627-01	2-Chloroethyl vinyl ether	J4
L230627-02	2-Chloroethyl vinyl ether	J4
L230627-03	2-Chloroethyl vinyl ether	J4
	cis-1,2-Dichloroethene	E
	Tetrachloroethene	E
	Trichloroethene	E
L230627-04	Bromomethane	J4
	Chloromethane	J4
	Dichlorodifluoromethane	J4
	1,1,2-Trichloro-1,2,2-trifluoroethane	J4
	Vinyl chloride	J4
	4-Bromofluorobenzene	J2
L230627-05	2-Chloroethyl vinyl ether	J4
	cis-1,2-Dichloroethene	E
	Tetrachloroethene	E
	Trichloroethene	E
L230627-06	Bromomethane	J4
	Chloromethane	J4
	Dichlorodifluoromethane	J4
	1,1,2-Trichloro-1,2,2-trifluoroethane	J4
	Vinyl chloride	J4
	4-Bromofluorobenzene	J2

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
E	GTL (EPA) - Greater than upper calibration limit: Actual value is known to be greater than the upper calibration range.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits
J4	The associated batch QC was outside the established quality control range for accuracy.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

	Control Limits				(AQ)	(SS)
2-Fluorophenol	31-119	Nitrobenzene-d5	43-118	Dibromfluoromethane	68-128	64-125
Phenol-d5	12-134	2-Fluorobiphenyl	45-128	Toluene-d8	76-115	69-118
2,4,6-Tribromophenol	51-141	Terphenyl-d14	43-137	4-Bromofluorobenzene	79-127	61-134

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
01/27/06 at 10:23:21

TSR Signing Reports: 341

Sample: L230627-01 Account: MILBUTHIL Received: 01/21/06 09:30 Due Date: 01/27/06 00:00 RPT Date: 01/27/06 10:22

Sample: L230627-02 Account: MILBUTHIL Received: 01/21/06 09:30 Due Date: 01/27/06 00:00 RPT Date: 01/27/06 10:22

Sample: L230627-03 Account: MILBUTHIL Received: 01/21/06 09:30 Due Date: 01/27/06 00:00 RPT Date: 01/27/06 10:22

Sample: L230627-04 Account: MILBUTHIL Received: 01/21/06 09:30 Due Date: 01/27/06 00:00 RPT Date: 01/27/06 10:22

Sample: L230627-05 Account: MILBUTHIL Received: 01/21/06 09:30 Due Date: 01/27/06 00:00 RPT Date: 01/27/06 10:22

Sample: L230627-06 Account: MILBUTHIL Received: 01/21/06 09:30 Due Date: 01/27/06 00:00 RPT Date: 01/27/06 10:22

APPENDIX D

DRM-2 FORM

INSTRUCTIONS TO REQUEST REVIEW OR APPROVAL OF PLANS AND REPORTS BY THE ILLINOIS EPA UNDER THE SITE REMEDIATION PROGRAM (FORM DRM-2)

General Information

A Remediation Applicant requesting review and evaluation of Site Remediation Program plans and reports by the Illinois Environmental Protection Agency ("Illinois EPA") or by a Review and Evaluation Licensed Professional Engineer or Geologist ("RELPEG") must complete a DRM-2 Form for each plan or report. More than one plan or report may be submitted under cover of this form. Please read the directions carefully and ensure that all required information is provided. All data and information should be typed or legibly printed in ink. The letters "NA" may be used, but only if the requested information is not applicable. Justification must be stated for any failure to provide applicable requested information.

Submit the **original and two copies*** of all information reported on this form to:

Illinois Environmental Protection Agency
Bureau of Land
Remedial Project Management Section
Site Remediation Program
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

Hand carried documents may be delivered (during normal business hours, 8:30 a.m. - 5:00 p.m.) to the above address.

To assist in implementing with your plans or reports, once they are approved by the Illinois EPA, you should keep a copy of every submittal and any relevant correspondence sent to the Illinois EPA.

Please fill out the sections on this form that are applicable. The requested information is described in the directions on the following pages.

*If a Review and Evaluation Licensed Professional Engineer or Geologist ("RELPEG") has been contracted to perform review and evaluation services, one additional copy of those plan(s) or report(s) must be included with the submittal. A RELPEG is a licensed professional engineer or geologist with whom a Remediation Applicant ("RA") has contracted to perform review and evaluation services under the direction of the Illinois EPA. The use of the RELPEG is an option available to a RA to obtain additional technical evaluation resources for a project. Additional information on how a RELPEG can be used in the SRP is provided in the regulations (35 Ill. Adm. Code 740.235).

Copies of Site Remediation Program applications can be downloaded as Portable Document Format ("PDF") forms from our web site:

http://www.epa.state.il.us/land/site-remediation/index.html

I. Site Identification:

Include the site name, street address, city, and Illinois Inventory I.D. number (if assigned). An Illinois Inventory I.D. Number (if one does not exist) will be assigned by the Illinois EPA.

II. Remediation Applicant Information:

Include the full legal name, company, street address, city, state, ZIP code, and telephone number of the Remediation Applicant. The Remediation Applicant or the authorized agent of the Remediation Applicant must request, over original signature, review and evaluation of the project documents being submitted.

III. Contact Person Information:

Include the full legal name, company, street address, city, state, ZIP code, and telephone number of the person to whom the Illinois EPA should send all correspondence. If there is more than one person, please attach additional information.

IV. Review and Evaluation Licensed Professional Engineer or Geologist (optional):

A Remediation Applicant may elect to contract with a Review and Evaluation Licensed Professional Engineer or Geologist ("RELPEG") to conduct review and evaluation of plans and reports on behalf and under the supervision of the Illinois EPA relative to Remediation Site activities. Prior to entering into the contract with the RELPEG, the Remediation Applicant must notify the Illinois EPA of the RELPEG to be selected and discuss the potential terms of the contract.

If the review of plans and reports included in this submittal are to be performed by a RELPEG, include the RELPEG's name, company, street address, city, state, ZIP code, telephone number, registration number, and license expiration date.

V. Project Documents Being Submitted:

For each document submitted for review, evaluation and approval under cover of the Form DRM-2, identify from the cover or title page the title, the date prepared, the preparer or author, and the party for whom the plan or report was prepared. Indicate by checking the appropriate box(es) the type(s) of Site Remediation Program plan(s) or report(s) the document represents.

If a preliminary review of estimated remediation costs is being requested, then a completed environmental tax credit budget plan application (DRM-4) must be included.

VI. Professional Engineer's or Geologist's Seal or Stamp:

The Licensed Professional Engineer or Geologist must attest, by original signature, the statement appearing in this section.

The Licensed Professional Engineer's or Geologist's name, company, telephone number, Professional Engineer's or Geologist's seal or stamp, registration number, and license expiration date shall also be provided in this section.

Illinois Environmental Protection Agency
Bureau of Land
Remedial Project Management Section
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

FOR ILLINOIS EPA USE:
LOG NO. _____

Site Remediation Program Form (DRM-2)
(To Be Submitted with all Plans and Reports)

I. Site Identification:

Site Name: Rich Adams

Street Address: 3004 W. Elm Street

City: McHenry Illinois Inventory I. D. Number: 1110605163

IEMA Incident Number: N/A

II. Remediation Applicant:

Applicant's Name: Rich Adams Company: Inverse Investments, LLC.

Street Address: P.O. Box 614

City: McHenry State: IL ZIP Code: 60051 Phone: 815.385.6804

I hereby request that the Illinois EPA review and evaluate the attached project documents in accordance with the terms and conditions of the Environmental Protection Act (415 ILCS 5), implementing regulations, and the review and evaluation services agreement.

Remediation Applicant's Signature: _____ Date: _____

III. Contact Person:

Contact's Name: Michael C. Butler Company: Miller-Butler Environmental Consulting, LLC.

Street Address: P.O. Box 1301

City: Highland Park State: IL ZIP Code: 60035 Phone: 773.368.6141

IV. Review & Evaluation Licensed Professional Engineer or Geologist ("RELPEG"), if applicable:

RELPEG's Name: _____ Company: _____

Street Address: _____

City: _____ State: _____ ZIP Code: _____ Phone: _____

Registration Number: _____ License Expiration Date: _____

All information submitted is available to the public except when specifically designated by the Remediation Applicant to be treated confidentially as a trade secret or secret process in accordance with the Illinois Compiled Statutes, Section 7(a) of the Environmental Protection Act, applicable Rules and Regulations of the Illinois Pollution Control Board and applicable Illinois EPA rules and guidelines. The Illinois EPA is authorized to require this information under Sections 415 ILCS 5/58 - 58.12 of the Environmental Protection Act and regulations promulgated thereunder. Disclosure of this information is required as a condition of participation in the Site Remediation Program. Failure to do so may prevent this form from being processed and could result in your plan(s) or report(s) being rejected. This form has been approved by the Forms Management Center.

V. Project Documents Being Submitted:

Document Title: Supplemental Site Investigation Report Date of Preparation of Plan or Report: 3.1.2006

Prepared by: Miller-Butler Environmental Consulting Prepared for: Inverse Investments, LLC.

Type of Document Submitted:

- Site Investigation Report - Comprehensive
- Site Investigation Report - Focused
- Remediation Objectives Report-Tier 1or 2
- Remediation Objectives Report-Tier 3
- Remedial Action Plan
- Remedial Action Completion Report
- Sampling Plan
- Health and Safety Plan
- Community Relations Plan
- Risk Assessment
- Contaminant Fate & Transport Modeling
- Environmental Remediation Tax Credit - Budget Plan Review
- Other: _____

Document Title: _____ Date of Preparation of Plan or Report: _____

Prepared by: _____ Prepared for: _____

Type of Document Submitted:

- Site Investigation Report - Comprehensive
- Site Investigation Report - Focused
- Remediation Objectives Report-Tier 1or 2
- Remediation Objectives Report-Tier 3
- Remedial Action Plan
- Remedial Action Completion Report
- Sampling Plan
- Health and Safety Plan
- Community Relations Plan
- Risk Assessment
- Contaminant Fate & Transport Modeling
- Environmental Remediation Tax Credit - Budget Plan Review
- Other: _____

VI. Professional Engineer's or Geologist's Seal or Stamp:

I attest that all site investigations or remedial activities that are the subject of this plan(s) or report(s) were performed under my direction, and this document and all attachments were prepared under my direction or reviewed by me, and to the best of my knowledge and belief, the work described in the plan and report has been designed or completed in accordance with the Illinois Environmental Protection Act (415 ILCS 5), 35 Ill. Adm. Code 740, and generally accepted engineering practices or principles of professional geology, and the information presented is accurate and complete.

Engineer or Geologist Name: Kim T. Miller

Professional Engineer's or Geologist's Seal or Stamp:

Company: Miller-Butler Environmental Consulting Phone: 773.294.4072

Registration Number: 062-057570

Signature: _____ License Expiration Date: 11.30.2007

Note: The authority of a Licensed Professional Geologist to certify documents submitted to the Illinois Environmental Protection Agency for review and evaluation pursuant to Title XVII of the Environmental Protection Act is limited to Site Investigation Reports (415 ILCS 58.7(f), as amended by P.A. 92-0735, effective July 25, 2002). A Licensed Professional Geologist cannot certify Remediation Objectives Reports, Remedial Action Plans or Remedial Action Completion Reports.

EXHIBIT B

Northern Environmental Technologies, Inc.
Remedial Objectives Report
and
Remedial Action Plan
February 22, 2007

Northern Environmental℠
Hydrologists · Engineers · Surveyors · Scientists

647 Academy Drive
Northbrook, IL 60062
Phone: 847-562-8577
Toll Free 888-680-8101
Fax: 847-562-8552
www.northernenvironmental.com

REMEDIAL OBJECTIVES REPORT
AND
REMEDIAL ACTION PLAN

CHLORINATED SOLVENT RELEASE

3004 WEST ELM STREET
McHENRY, ILLINOIS

February 22, 2007

Prepared For:

Inverse Investments, LLC
P.O. Box 614
McHenry, Illinois

Prepared By:

Northern Environmental Technologies, Incorporated
647 Academy Drive
Northbrook, Illinois 60062

Project Number: 05-2300-0572

M. Paul Karalius
Project Manager

Michael C. Butler, PE
Director

Northern Environmental
Hydrologists · Engineers · Surveyors · Scientists

647 Academy Drive
Northbrook, IL 60062
Phone: 847-562-8577
Toll Free 888-680-8101
Fax: 847-562-8552
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TABLE OF CONTENTS

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Toll Free 888-680-8101
Fax: 847-562-8552
www.northernenvironmental.com

TABLE OF CONTENTS (Continued)

FIGURES

TABLES

APPENDICES

1.0 EXECUTIVE SUMMARY

Northern Environmental has been retained by Inverse Investments, LLC to prepare a Remedial Objectives Report (ROR) and Remedial Action Plan (RAP) for the Site located at 3004 West Elm Street, McHenry, Illinois. This ROR/RAP was prepared in accordance with the Illinois Environmental Protection Agency (Illinois EPA) Title 35 Illinois Administrative Code (IAC) 740 Site Remediation Program (SRP) requirements for an ROR and RAP.

The ROR/RAP is prepared to address chlorinated solvent contamination at the Site. The goal of the ROR/RAP is to determine the remedial method by which cleanup of the Site can be achieved and to obtain Illinois EPA approval to implement the plan. The RAP also describes the process by which remediation objectives will be achieved and the "No Further Remediation" letter is obtained. The remedial action will be implemented following Illinois EPA approval of the RAP.

The chlorinated solvents tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethylene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), and vinyl chloride (VC) were detected at concentrations exceeding the applicable Tier 1 Soil Remediation Objectives (SROs). The potential exposure routes include: groundwater ingestion, soil inhalation, and soil ingestion. The maximum concentration of PCE also exceeds the soil saturation limit (Csat) in boreholes located in the west-central portion of the Site in the vicinity of Borings BH 13/17 and BH 14/16. PCE was the only compound detected at a concentration above Csat. PCE was detected at a maximum concentration of 560 ppm, which exceeds the Tier 1 Csat of 240 ppm.

The remedial objective for PCE at the Site is to remediate the contamination to below Csat (240 ppm). The volume of soil exceeding the Tier 1 Csat is approximately 161 cubic yards. Although the RAP identifies technologies designed to treat PCE contamination, other contaminants of concern will also be addressed as part of the remedial action.

Four remedial options were evaluated for the Site. The remedial methods evaluated were Excavation, Transportation and Disposal, iSOC, Bioremediation using HRC, and Chemical Oxidation using RegenOx. The proposed methods were evaluated based on the site-specific needs, cost, time, effectiveness, safety, and the impact the remediation technology would have on operations of the facility.

Bioremediation using HRC has been selected as the remedial option for the Site. Bioremediation using HRC will be used to reduce the PCE concentration below Csat (240 ppm). Although each method evaluated is fully capable of remediating the Site, Bioremediation using HRC appears to be the most effective remedial option to obtain the site-specific remedial objectives. There were notable differences in overall project costs, complexity of design, remediation time, safety and site disruption of each method. Bioremediation was selected based on cost, ability to implement, and the effectiveness of the technology to achieve the remediation objectives in a relatively short time frame. The cost of the remedial action using Bioremediation is estimated to be $51,365.00. Confirmation sampling will be conducted to verify that the soil and groundwater remediation objectives are met.

Remedial Action will also consist of Engineered Barriers, Institutional Controls, and implementation of Environmental Land Use Controls (ELUC), if necessary. Engineered Barriers and Institutional Controls will be used on-Site to restrict exposure to remaining soil and groundwater contamination. Adjacent properties are currently zoned industrial/commercial. The

remedial action for adjacent properties may include the use of ELUCs as Institutional Controls to restrict the neighboring properties to industrial/commercial use. Where applicable, the Institutional Controls in the form of deed restrictions will also use the City of McHenry groundwater ordinance to restrict the installation of groundwater extraction wells and use of groundwater for potable water. The City of McHenry groundwater ordinance is currently not approved by the IEPA because it does not address existing wells. As such, the use of the deed restrictions in the form of ELUCs may be required to exclude potential exposure pathways to soil and groundwater contamination for these properties. The actual number of properties requiring ELUCs will be determined by modeling PCE based on any remaining contamination once the remedial action is completed.

Following completion of the remedial action and confirmation sampling, a Remedial Action Completion Report (RACR) will be submitted to the Illinois EPA for review and approval, and a NFR will be requested for the Site.

Northern Environmental has prepared this RAP in accordance with 35 IAC 740 Site Remediation Program and 35 IAC 742 Tiered Approach to Corrective Action Objectives requirements. This report meets the requirements of the Illinois EPA and the Fund for a Remedial Objectives Report and Remedial Action Plan.

2.0 INTRODUCTION AND BACKGROUND

This ROR/RAP addresses the recognized environmental conditions (RECs) and related contaminants of concern identified at the Inverse Investments property located at 3004 West Elm Street, McHenry, Illinois (the Site). The ROR establishes the cleanup objectives for the site and the RAP describes the proposed remedy and evaluates the ability of the proposed remedy to achieve the remediation objectives. The organization and format of this ROR/RAP is generally consistent with the requirements and guidelines provided in 35 Illinois Administrative Code (IAC) 740 Site Remediation Program (SRP).

2.1 Site Description and Location

The property located at 3004 West Elm Street (Route 120), McHenry, Illinois is approximately 0.30 acres in size and is improved with a one-story brick-and-block building. The building encompasses approximately 0.11-acres of the Site. The area surrounding the building is asphalt paved. The Site location and local topography are shown on Figure 1.

The building on the Site is currently occupied by Enterprise Rent-A-Car. Prior to the current business, the Site was occupied by a tire store. Historically, the Site was occupied by an automotive repair shop and a drycleaner.

The Site is located in a mixed-use commercial, residential, and recreational area. The Site is bordered to the north by a VFW Park, to the east and west by commercial properties, and to the south by Elm Street. Beyond Elm Street to the south are commercial properties, followed by residential properties located approximately 500 feet south of the Site.

2.2 Area Geology/Hydrogeology

The Illinois State Geological Survey (ISGS) Circular, entitled "Potential for Contamination of Shallow Aquifers in Illinois", commonly known as the Berg Circular, was referenced to accurately locate the Site in relation to the regional subsurface soil formations that are believed to exist in the general vicinity of the Site. The Site appears to be in an "A2" designated area, which the Berg Circular describes as "Thick permeable sand and gravel, within 20 feet of surface."

During the site investigation activities conducted by The Green Environmental Group, Ltd. (Green) in August, September, and December 2002, and by Miller-Butler Environmental in November 2005, native clay with varying amounts of sand was encountered to a depth of approximately 15 feet below grade (fbg) across the Site. Native brown and gray sand was typically encountered from 15 fbg to the borehole termination depths (a maximum of 44 fbg).

The ground surface at the Site appears to be asphalt on grade. Visual observation of the topography indicates that run-off on the Site tends to flow to storm sewer drains located along West Elm Street.

Soil saturation conditions were observed in the boreholes advanced between 8.5 and 11 fbg. Measured groundwater depths in the groundwater monitoring wells at the site on February 17, 2006 ranged from 6.75 to 9.1 feet fbg, with an average depth to groundwater of 7.61 fbg. Based on the groundwater depth measurements, groundwater flow at the Site appears to be to the southwest.

Soil boring and monitoring well logs from the investigation conducted by Miller-Butler Environmental in November 2005 are provided in the Supplemental Site Investigation Report (Miller-Butler, 2006) and the Focused Site Investigation Report (Green, 2003). Depth to groundwater measurements are summarized in Table 1. Groundwater elevations and groundwater flow direction are shown on Figure 5.

The hydraulic conductivity (K) at the Site has been determined to be approximately 2.10×10^{-4} feet per minute (ft/min) (1.07×10^{-3} centimeters per second (cm/s)).

Groundwater at the Site was evaluated to determine proper designation in accordance with IAC Title 35, Part 620.201. Ground water at the Site meets the criteria for Class I Potable Resource Ground Water because of the following:

- The hydraulic conductivity, as determined by a slug test, was not less than 1×10^{-4} cm/sec and is therefore not Class II groundwater.
- Unconsolidated sand or gravel greater than 5 feet in thickness was observed on the Site during site investigation activities.
- No groundwater ordinance is in effect in McHenry, Illinois.
- Groundwater at the Site does not meet the criteria for Class III Special Resource Groundwater or Class IV Other Groundwater.

2.3 Previous Studies and Investigations

The following previous studies were completed at the Site, based on the information provided in the Focused Site Investigation Report (Green, 2003) and Supplemental Site Investigation Report (Miller-Butler, 2006):

- August 28, 2002: Green completed an investigation consisting of three soil borings (BH-1 through BH-3) at the Site.
- September 19 and 23, 2002: Green completed an investigation consisting of six soil borings (BH-4 through BH-9) at the Site.
- October 9, 2002: Green completed an investigation consisting of the installation of three monitoring wells (MW-1 through MW-3) at the Site.
- October 17, 2002: Green completed groundwater monitoring and sampling at the Site.
- December 12 and 17, 2002: Green completed an investigation consisting of five soil borings (BH-10 through BH-14) and two monitoring wells (MW-4 and MW-5) at the Site.
- January 16, 2003: Green conducted groundwater monitoring and sampling activities on monitoring wells MW-4 and MW-5 at the Site.
- October 2, 2003: Green submitted a Focused Site Investigation Report (SIR) to the Illinois EPA.
- December 18, 2003: Illinois EPA issued a response to the SIR, requesting that additional soil and groundwater investigation be conducted.
- January 21, 2004: Green submitted a response to the Illinois EPA's December 2003 letter, proposing the additional soil and groundwater investigation, and promising additional information to be provided in an addendum report.
- March 24, 2004: Illinois EPA issued a response to Green's January 2004 letter, providing more detailed instructions for the locations and depths of the proposed soil borings and monitoring wells.
- July 29, 2005: Miller-Butler Environmental submitted a detailed Site Investigation Plan to the Illinois EPA.

- October 25, 2005: Illinois EPA issued a response to the Site Investigation Plan, approving it with an additional request to sample all site monitoring wells.
- November 16 and November 17, 2005: Miller-Butler installed six soil borings (BH15 through BH 20) to determine vertical and horizontal extent of contamination at the Site, and to determine subsurface geology.
- March 1, 2006: Miller-Butler submitted a Supplemental Site Investigation Report.
- August 30, 2006: Illinois EPA conditionally approved the Supplemental Site Investigation Report.

The investigations at the Site identified the following:

- The Site was formerly occupied by a drycleaning facility from 1970 to 1977.
- The Site was originally occupied by an automotive repair facility which was equipped with an in-ground hydraulic lift. The hydraulic lift and associated hydraulic oil reservoir were contained within a concrete vault reducing the possibility of a release to the Site.
- The chlorinated solvent contaminants of concern present above Tier 1 Soil Remediation Objectives (SROs) at the Site are PCE, TCE and cis-1,2-DCE. Potential exposure routes include soil inhalation, soil ingestion and groundwater ingestion. VOC contamination in soil appears to be present at concentrations exceeding Tier 1 SROs for inhalation and ingestion in the area encompassing BH-17 and BH-16. Tier 1 SROs for Class I groundwater have also been exceeded in soils across the western and northwestern portions of the Site.
- The chlorinated solvent contaminants of concern present above Tier 1 Groundwater Remediation Objectives (GROs) at the Site are PCE, TCE, cis-1,2-DCE and VC (VC). VOC contamination in groundwater appears to be present at concentrations exceeding Tier 1 GROs for Class I groundwater in all on-site monitoring wells with the exception of monitoring well MW-1.
- The maximum concentration of contaminants of concern in soil are 560 mg/kg PCE, 24 mg/kg TCE and 3.7 mg/kg cis-1,2-DCE.
- The maximum concentration of contaminants of concern in groundwater are 15 mg/L PCE, 2.6 mg/L TCE, 8 mg/L cis-1,2-DCE and 3.4 mg/L VC.
- Groundwater flow appears to be toward the southwest at an average of 10 feet per year Green Environmental, 2003).
- Groundwater at the site is classified as Class I Potable Resource Water based on the geological and hydrogeological characteristics of the Site.
- Average depth to groundwater is 7.61 fbg.

There is currently no groundwater ordinance adopted by the City of McHenry. Potable water is obtained from municipal wells or from private wells installed on individual properties. Additionally, some residents are using private wells for potable water service

Northern Environmental has prepared this ROR/RAP to address contamination at the Site. This report meets the requirements of the Illinois EPA Title 35 IAC 740 Site Remediation Program (SRP). Based on the findings listed above and in accordance with Title 35, IAC Section 740, Northern Environmental has determined site-specific remediation objectives in accordance with Title 35, IAC Section 742 Tiered Approach to Corrective Action Objectives (TACO).

3.0 EVALUATION OF TIER 1 REMEDIATION OBJECTIVES

In compliance with state regulations (Title 35 IAC, Part 740), Tier 1 remedial objectives were evaluated to determine the potential volume of sediments requiring corrective action while still being protective of groundwater quality and human health and welfare. Class I ground water has been determined to be present at the Site in accordance with the criteria listed in Title 35 IAC, Part 620. In addition, the Site is zoned for industrial/commercial land use. Contamination was evaluated using Tier 1 Industrial/Commercial Remedial Objectives. The following are the contaminants of concern in Site soil and groundwater and their corresponding Tier 1 Remediation Objective exceedances.

Tier 1 remedial objectives for PCE were exceeded for the following exposure routes:
- Soil Component of Groundwater Ingestion for Class I Groundwater
- Industrial/Commercial Inhalation
- Industrial/Commercial Ingestion
- Construction Worker Inhalation
- Construction Worker Ingestion
- Soil Saturation Limit
- Groundwater Quality Objective for Class I Groundwater

Tier 1 remedial objectives for TCE were exceeded for the following exposure routes:
- Soil Component of Groundwater Ingestion for Class I Groundwater
- Industrial/Commercial Inhalation
- Industrial/Commercial Ingestion
- Construction Worker Inhalation
- Construction Worker Ingestion
- Groundwater Quality Objective for Class I Groundwater

Tier 1 remedial objectives for cis-1,2-DCE were exceeded for the following exposure routes:
- Soil Component of Groundwater Ingestion for Class I Groundwater
- Groundwater Quality Objective for Class I Groundwater

Tier 1 remedial objectives for VC were exceeded for the following exposure route:
- Groundwater Quality Objective for Class I Groundwater

Tier 1 remedial objectives for 1, 1-DCE were exceeded for the following exposure route:
- Groundwater Quality Objective for Class I Groundwater

4.0 DETERMINATION OF TIER 2 REMEDIATION OBJECTIVES

In accordance with Title 35 IAC 740.440 and Title 35 IAC 742.600, Tier 2 remediation objectives have been developed for all contaminants of concern and corresponding exposure routes exceeding Tier 1 remediation objectives. After the implementation of remedial action to reduce soil contamination to below the saturation limit for PCE at the Site, conditions will meet the requirements for use of Tier 2 evaluation in accordance with Title 35 IAC 742.600(e).

Site Specific Level (SSL) Equations and Risk Based Corrective Action (RBCA) equations were calculated using various input parameters. Input parameters used were default, chemical specific, and site specific values. For the Site, site specific values for parameters such as total organic carbon are similar to the default values presented in Title 5 IAC 742 Appendix C Table B. As such, Soil Remediation Objectives for specific contaminants of concern will be the Tier 1 Soil Remediation Objectives for Industrial/Commercial Inhalation and Ingestion and Construction Worker Exposure Routes.

4.1 Risked Based Corrective Action Equation

Tier 2 calculations were performed for the Site using RBCA Equation R26 to determine the potential concentration of contaminants in groundwater migrating from the Site. In addition, RBCA Equation R15 was performed to calculate the migration distances for the Soil Component of the Groundwater Ingestion. To perform this calculation, a maximum groundwater contamination resulting from the observed maximum soil concentration was calculated using RBCA Equation R 12. The calculated maximum groundwater concentration was used in Equation R15 to model the distance to the point of compliance with the Class I Groundwater Ingestion Remediation Objective. Calculations and variables used in Equation R26 and associated equations are included in Appendix A. The results of equation R26 are shown in Table 5.

Input Parameters

When selecting the input parameters for Equation R26, default parameters for a sandy/clay soil type were used because the soil contamination appears to have the highest concentrations in that particular unit. Input parameters that utilized site specific information that were field measured are; hydraulic gradient (i), fraction organic carbon (Foc), hydraulic conductivity (K), average soil moisture content (w), source width (Sw), source length (W), source thickness (Sd) and soil concentration (Csoil).

Hydraulic Gradient (i)

Two rounds of water levels were gathered to determine the hydraulic gradient and flow direction at the site. Groundwater levels were gathered in October 2002 and November 2006. Groundwater flow was mapped for both collection days, both showing similar flow direction and hydraulic gradient. Water levels at the Site are consistently around 6 ft. to 8 ft. bgs. Groundwater flow is to the southwest. The hydraulic gradient calculated for the Site is 0.0146.

Fraction Organic Carbon (Foc)

Default values for TOC were used for the calculations. The value selected for Foc is consistent with the values presented in 35 IAC 742 Appendix C. The default surface value of 0.006 g/g for surface soils was utilized in the RBCA equations.

Hydraulic Conductivity (K)

In-situ hydraulic conductivity testing (slug testing) was performed on monitoring well MW 1. Two slug tests were performed with the results evaluated by AQUIFER, a computer based groundwater modeling program. The Bouwer – Rice method was used to evaluate the data for the site. Results of this analysis indicate a hydraulic conductivity of 2.1×10^{-4} ft/min (9.22 cm/day) and 2.16×10^{-4} ft/min (9.35 cm/day). An average value of 9.35 cm/day was used for the hydraulic conductivity. Data from the Hydraulic Conductivity test is presented in Appendix B.

Average Soil Moisture Content (w),

The soil moisture content value used for the RBCA equations is the default value presented in Title 35 IAC 742 Appendix C, Table D. The percent moisture is 10% for surface soils which was utilized as the average soil moisture content (w) value for RBCA equations.

Source Width (Sw), Length (W), Thickness (Sd), and Concentration (Coil)

Several boreholes near and surrounding the potential source of contamination were used to construct a contour map of the contamination. The source thickness was determined by examining contaminant concentrations and PID response. The maximum concentrations for the contaminants of concern are shown in Table 2 and Table 3. Only actual laboratory analytical values were utilized for the RBCA equation models.

The source plumes used in Equations R26 models represented the greatest remedial Tier 1 Objective exceeded at the Site. The highest concentration within the plume is conservatively assumed to be constant across the entire contour area.

The source length and width for the PCE contaminated area is shown in Figure 3. The source width and length contours were conservatively drawn to illustrate the maximum area to likely be present at the concentrations used in the modeling. For TCE, cis-1,2-DCE, and VC the plume size is assumed to be the size of the source contour area shown in Figure 3.

Calculations and variables used in the Equations R26 and associated equations are included in Appendix A. The results of equations are shown in Table 5.

5.0 EVALUATION OF TIER 2 REMEDIATION OBJECTIVES

In compliance with state regulations (Title 35 IAC, Part 740), Tier 2 remedial objectives were evaluated to determine the potential volume of sediments requiring corrective action while still being protective of ground-water quality and human health and welfare. Tier 2 remediation objectives were developed as discussed in Section 4.0 of this report. A comparison of Tier 1 and Tier 2 remediation objectives for the required contaminant of concern and corresponding exposure route is included in Table 4. Using the applicable remediation objectives as shown in Table 1, exceedances of the following exposure routes still exist for contamination present:

Tier 1 remedial objectives for PCE were exceeded for the following exposure routes:
- Groundwater Quality Objective for Class I Groundwater
- Soil Component of Groundwater Ingestion for Class I Groundwater
- Industrial/Commercial Inhalation
- Industrial/Commercial Ingestion
- Construction Worker Inhalation
- Soil Saturation Limit

Tier 1 remedial objectives for TCE were exceeded for the following exposure routes
- Soil Component of Groundwater Ingestion for Class I Groundwater
- Industrial/Commercial Inhalation
- Industrial/Commercial Ingestion
- Construction Worker Inhalation
- Construction Worker Ingestion
- Groundwater Quality Objective for Class I Groundwater

Tier 1 remedial objectives for cis-1,2-DCE were exceeded for the following exposure routes:
- Soil Component of Groundwater Ingestion for Class I Groundwater
- Groundwater Quality Objective for Class I Groundwater

Tier 1 remedial objectives for VC were exceeded for the following exposure route:
- Groundwater Quality Objective for Class I Groundwater

Tier 1 remedial objectives for 1, 1-dichloroethene were exceeded for the following exposure route:
- Groundwater Quality Objective for Class I Groundwater

Through the use of the SSL Equations, remedial values for several exposure pathways were evaluated, reducing the sizes of the contamination plumes, but none could be eliminated as possible concerns to the Site. The remedial objective for the Csat for PCE is 240 parts per million (ppm).

To determine the extent of impact of contamination remaining in groundwater in the area of the Site, Tier 2 calculations were performed for the Site using RBCA Equation R26. Using Equation R26, it was demonstrated that the maximum groundwater concentration for all contaminants of concern would fall below Tier 1 Groundwater Ingestion Remediation Objectives for Class I Groundwater within 351 feet of the source area due to the moderate-high groundwater flow velocity. The concentrations in Table 4 represent the soil remediation objectives for the Site. The results of the R26 calculations are presented in Appendix A.

Water well logs for wells located in the vicinity of the Property were obtained during the investigation phase of the project. The EDR Illinois Water Well Report indicates that 51 wells are located within an approximately 1,000 foot radius of the Site and 171 wells are within 2,500 feet of the Site. Based on the limited information provided in the EDR Reports, 5 wells were installed to a depth between 17 feet and 50 feet (within a 1000 foot radius) and the remainder were installed to depths between 51 feet and 168 feet. EDR notes indicate wells were developed for domestic and commercial use.

Considering that remediation of the Site will be required and that the Tier 1 and Tier 2 remedial objectives for soil to attain Class I groundwater compliance do not differ significantly, a Remedial Action Plan is included in Section 8.0 of this report. The Remedial Action Plan considers active remediation to reduce contaminant concentrations below Csat and the use of engineered barriers and institutional controls in the form of Environmental Land Use Controls.

6.0 REMEDIAL ACTION OBJECTIVES

The goal of the remedial action is to remediate the soil at the Site in order to achieve the remediation objectives and to obtain a No Further Remediation Letter for the Site. The contaminants of concern for the Site are presented in Section 4.0 and Section 5.0 of this report and their corresponding Tier 1 remedial objective exceedances

Through the use of the RBCA Equations, remedial values for several exposure pathways were elevated, reducing the sizes of the contamination plumes, but none could be eliminated as possible concerns to the Site.

Using Equation R26, it was demonstrated that the maximum groundwater concentration for all contaminants of concern would fall below Tier 1 Groundwater Ingestion Remediation Objectives for Class I Groundwater within 351 feet of the source area. This is due to the moderate-high groundwater flow velocity.

The remedial objective for PCE is to remediate the Site to below the Csat concentration of 240 ppm in accordance with the Title 35 IAC 742 Appendix A Table A. Based on data obtained from the Focused Site Investigation (Green, 2003) and the Supplemental Site Investigation (Miller-Butler, 2006), the area above Csat is 31 feet long by 14 feet wide and 10 feet thick. The zone of Csat contamination appears to be between 10 and 20 fbg. Approximately 161 cubic yards of soil exceed Csat.

7.0 SELECTION OF REMEDIAL OPTIONS

7.1 Relevant Site Characteristics

There are several relevant site characteristics that were taken into consideration when evaluating remedial options for the Site. Relevant site characteristics are site features or conditions that have potential impacts on the remedial method selected and the overall success of the remediation. The observed site characteristics are summarized below:

Observed Site Characteristics

- Shallow groundwater table at approximately 7.61 feet bg.
- Soil contamination at the source at a maximum PCE concentration of 560 mg/kg.
- Soil contamination at a depth at the source of greater than 12 feet bg.
- Soil contamination up to ~ 20 feet bg.
- The site is occupied by commercial property.
- Previous investigations indicate 51 wells may be within 1000 feet of the Site.

All of the above site characteristics have the potential to significantly impact the remedial method selected for the Site and the success of the remedial action. Therefore, each of the above relevant site characteristics have been considered and are discussed in the selection of remedial methods discussed below.

7.2 Selection of Remedial Options

The goal of the Remedial Action is to remediate the site soil and groundwater in order to obtain a "No Further Remediation" letter for the Site.

Four remedial options were briefly evaluated for the Site. The remedial methods evaluated were Excavation, Transportation and Disposal, iSOC, Accelerated Bioremediation using HRC, and Chemical Oxidation with RengenOx™. The proposed methods were evaluated based on the site-specific needs of the Site. Cost, time, effectiveness, safety, site disruption and other issues were all considered when selecting the appropriate remedial method for the Site.

7.2.1 Excavation, Transportation and Disposal

Soil excavation and disposal is an applicable remediation technology for 3004 West Elm Street. The source area exceeding the saturation limit (approximately 161 cubic yards) would be excavated, transported and disposed of at a licensed hazardous waste disposal facility. The advantages and disadvantages of applying this remedial technology are summarized below.

Advantages:

- Site remediation can be completed approximately within two to three weeks.
- No remedial system to monitor.
- Works well for soil above or below the water table.
- Works well regardless of soil type.

Disadvantages:

- May be disruptive to site activities.
- Project costs can increase significantly if more excavation is required.
- Not all soil can be remediated via excavation especially under the exterior walls.

- Cost could increase significantly if the excavation fills with groundwater that would need groundwater disposal.
- Excavation would not directly treat impacted groundwater.

A majority of the contaminated soil is located beneath the building with less than 25% of the contamination beneath the paved area outside the exterior of the building. The building is currently leased by Enterprise Rental Car and is an active facility with a garage and warehouse located in the rear of the facility. The contamination is located next to the wall separating the office space from the warehouse. Contamination at the Site is also found under the exterior wall of the facility. Due to the location of the contaminated soil and the geologic and hydrogeologic conditions of the Site, other technologies would need to be applied to fully remediate the site. Due to the sandy soils, the size of the excavation and measure to prevent damage to the foundation would increase the costs of the remedial action. Therefore, excavation and disposal beneath the building is not practical or able to be implemented due to the ongoing operations at the facility. As such, this technology will not be given further consideration.

7.2.2 iSOC

iSOC® is a bioremediation technology used for remediating a wide variety of contaminants including chlorinated compounds in groundwater or saturated porous media. It is a gas delivery system using a patented unique method of infusing supersaturated levels of dissolved gas into liquids. The technology relies on a mass transfer device constructed of a porous micro-fiber that provides a large surface area for mass transfer. The pressure at which gas is infused into the groundwater is such that efficient mass transfer takes place without sparging. The bio-remediation technology can be used as both an aerobic or anaerobic process. In the case of 3004 West Elm Street where chlorinated solvents are the contaminants of concern, hydrogen would be used under anaerobic conditions to remediate the Site. Generally, the iSOC® is installed in a 2-inch diameter (or larger) monitoring well and connected to a regulated supply of hydrogen. Gas is continuously infused over a period of several months to up to several years, as needed.

The advantages and disadvantages of applying the technology are summarized below.

Advantages:

- Can be used with a number of different gases for treatment of sites under anaerobic or aerobic conditions.
- Effective at remediating at all ranges of contaminant levels.
- Low annual operation and maintenance costs.
- Equipment setup is cost effective with low operation and maintenance.
- No power requirements, off-gases, pumps or hazardous byproducts.
- Can be used as a barrier for further contaminant migration.

Disadvantages:

- Hydrogen gas is flammable and precautions are necessary for handling and storage.
- Generally installed at the leading edge of a contaminant plume with biodegradation of contaminants occurring downstream of the infusion well.
- Two step process for degradation of PCE and daughter products.
- Health and safety measures need to be observed during application.

A majority of the contamination is located beneath the building with less than 25% of the contamination beneath the paved area outside the building. Although iSOC is an applicable

technology, the potential hazards associated with the use of hydrogen gas at an active facility would require special precautions and safety measures to ensure work areas are properly protected and ventilated. Due to the potential hazards associated with this alternative, this technology will not be considered further.

7.2.3 Accelerated Bioremediation Using HRC

Bioremediation using an extended release formula Hydrogen Release Compound (HRC) was evaluated to remediate the soils and groundwater impacted by the chlorinated solvent release at the Site. Based on manufacturer's calculations, one application of HRC will be needed to remediate the contamination at the Site. However, prior to implementation of a full scale system, a pilot test designed to remediate 24 percent of the Site will be conducted to verify the effectiveness of the system and to obtain the performance characteristics. During the full scale remedial action, 8 injection borings will be installed in the treatment area to a depth of 20 fbg. Injection of HRC will be applied from 10 to 20 fbg in the area where contamination exceeds Csat. Approximately 5,280 pounds of HRC will be added during the remedial action. After injecting the HRC compound, groundwater will be monitored to see the effect and progress of the bioremediation. Bioremediation using HRC has been successfully used at many underground storage tanks and industrial facilities to remediate hydrocarbons and chlorinated solvents. Total remediation time for one application using HRC is estimated to be 1 year. Advantages and disadvantages of applying this method are summarized below.

Advantages:

- Very effective at reducing contaminant levels in all soil types.
- Effective at remediating at all ranges of contaminant levels.
- Effective at remediating multiple contaminant types.
- Widely used and proven remedial technology.
- HRC compound remains active in soil and groundwater for months.
- Limited health and safety procedures need to be observed during application.
- Slow reaction allows HRC to remain in the soil longer to remediate residual contamination.

Disadvantages:

- Remediation time is longer, typically months to years.
- Monitoring costs are high.
- Multiple applications are usually needed
- Health and safety measures need to be observed during application.
- Highly dependent on soil and groundwater characteristics.

Accelerated Bioremediation using HRC is discussed further in Section 8.0.

7.2.4 Chemical Oxidation Using RegenOx™

RegenOx™ is a chemical oxidation technology for the treatment of organic contaminants including high concentration source areas in vadose zones and saturated soils. RegenOx™ is a proprietary compound developed to react with petroleum hydrocarbons and chlorinate compounds comparable to Fenton's Reagent but without the hazards associated with exothermic reactions. Chemical Oxidation with RegenOx™ will continue to perform approximately 30 to 60 days after injection.

A minimum of three applications of RegenOx™ will be needed in the area under the building

where contaminant concentrations exceed Csat. It is recommended that an injection well spacing of 8 feet on-center be used for each application. For a 31 foot by 14 foot area 12 injection points will be installed in 3 rows. The injection points will be screened from 10 feet to 20 feet. The total volume of chemical oxidant to be applied during the three applications is estimated to be 1,080 pounds (plus activator compound). After injecting the chemical oxidant, groundwater will be monitored to determine the effect and progress of remediation. The time to complete each injection and to verify the results of each application is estimated to be 60-90 days. The time to complete the remedial action is estimated to be approximately 1 to 1.5 years. Advantages and disadvantages of applying this method are summarized below.

Advantages:

- Very effective at reducing contaminant levels in all soil types.
- Effective at remediating at all ranges of contaminant levels.
- Effective at remediating multiple contaminant types.
- Widely used and proven remedial technology.

Disadvantages:

- More than three applications may be required.
- Remediation time is dependent of dispersion of chemical oxidant through silty fine sand/silty clay soils.
- Monitoring costs are high.
- Health and safety measures need to be observed during application.
- High Chemical Cost.

Chemical oxidation using RegenOx is discussed further in Section 8.0.

7.3 Cost Evaluations and Comparison

Cost estimates were obtained for two remedial options evaluated for the Site. The cost estimate for Bioremediation using HRC is estimated to be $51,365.00. The cost estimate for Chemical Oxidation using RegenOx™ is estimated to be $79,068.00. A comparison of the cost estimates for the two remedial options is presented in Table 6.

The cost estimates presented in Table 6 are based on current project information and are for the Client and the Illinois EPA to convey the probable range of project costs. Since the engineer has limited control over the cost of labor, materials, equipment and services provided by others, or over the contractor(s) method of determining prices, or over competitive bidding or market conditions, the Engineer's opinion of project costs are made on the basis of the engineers experience and judgment. The Engineer cannot and does not guarantee that proposals, bids or actual construction costs will not vary from the Engineer's opinion.

8.0 RECOMENDED REMEDIAL ACTION PLAN

Accelerated Bioremediation using HRC Advanced™ is recommended as the most appropriate remedial method for the Site. Compared to the alternative methods, Bioremediation using HRC is the recommended remedial option for the following reasons:

- More effective remedial method
- Less overall project cost
- Impact to operations at the facility is minimal
- Alternative methods in conjunction with the HRC may not be required

Although all of the remedial options are capable of achieving remediation objectives, Bioremediation using HRC would satisfy the Illinois EPA requirements, limit disruption to the business at the Site, and allows remediation objectives to be achieved in a relatively short period of time. In addition, the slow reaction process allows HRC to remain in the soil longer to react with any residual contamination that may be present. Chemical Oxidation with RegenOx can remediate the Site in a shorter amount of time but at a higher cost. Although excavation, transportation and disposal may remediate soils in a relatively short period of time, additional methods, such as chemical oxidation or bioremediation using HRC may be required in areas where contamination may not be accessible to conventional excavation methods. In addition, excavation beneath the building would be disruptive to the operation of the business within the building and additional precautions would be required to excavate near the foundation walls. ISOC is an applicable technology but specific precautions would be needed to avoid hazards associated with infusion of hydrogen gas.

Bioremediation using HRC solution will be used to remediate the soils and groundwater impacted by the chlorinated solvent release at the Site. One application of HRC will be needed to remediate the contamination at the Site. Approximately 5,280 pounds of HRC will be injected during the full scale operation. The application will consist of installing 8 injection points using a direct push technique (Geo-probe®). The actual number of points may vary based on preliminary screening results and the results from the pilot test proposed for the Site. The HRC solution will be injected into the subsurface from inside and outside the facility. For the pilot test, HRC injection will occur outside the facility to minimize disruption of the business operation. Extraction wells may be used to control HRC migration in the subsurface. Following the injection, additional boreholes will be drilled and sampled along with sampling of monitoring wells at the Site to confirm the reduction of contaminants in the subsurface soils and groundwater.

Following the confirmation sampling and receipt of the results, additional modeling will be conducted to determine potential migration of remaining contaminants based on the sample results. Based on those results, an evaluation will be made regarding subsequent remedial options.

The goal of the remedial action is to remediate the soil to below Csat of 240 mg/kg for PCE. Remedial Action will also consist of Engineered Barriers, Institutional Controls, and implementation of Environmental Land Use Controls (ELUC), if necessary.

8.1 Scope of Work

The scope of work will consist of pilot testing and sampling, remedial site preparation and the remedial action. Each phase of the project is described in detail below.

8.1.1 HRC Injection

HRC Injection will be carried out in the one area noted on Figure 2. Injection will be done during a time that would minimize disruption to the operation of the facility. One application of HRC is proposed to remediate the contamination at the Site. Approximately 5,280 pounds of HRC will be injected during the full scale operation.

The application will consist of installing 8 injection points using a direct push technique (Geo-probe®). The actual number of points may vary based on preliminary screening using a photoionization detector and the pilot test results. The HRC solution will be injected into the subsurface from inside and outside the facility. Soil and groundwater confirmation sampling will be conducted to determine the effectiveness of the injection and monitor the progress of the remediation, and to document the reduction in contamination.

8.1.2 Health and Safety Plan

During the mixing and injection processes, proper safety level will need to be observed by all present within the remediation area. The on-site manager will define the remediation area. A health and safety plan for HRC handling and injection should be made and implemented by the contractor performing the remediation. The health and safety plan should be used during the entire remedial process for the Site.

8.1.3 Confirmation Sampling Plan

Following the injection event, soil and groundwater at the Site will be tested for VOCs. Soil and groundwater sampling will be conducted quarterly over five sampling events (at intervals of 3, 6, 9, 12 and 15 months) post-injection to allow the HRC to disperse and completely react with organic compounds and to determine the effectiveness of the injection. Confirmation sampling at these intervals will monitor the progress of the remediation. The reduction in contamination will be documented.

Groundwater monitoring wells may be used to determine the status of the injection and to determine if chemical reactions have stopped. Up to four soil borings will be advanced to a depth of 20 fbg to collect the samples. The soil samples will be collected from each boring at the interval with the highest concentration based on field screening with a Photoionization Detector (PID). All the collected samples will be field screened using the PID. One worst-case sample will be collected from each boring and preserved for laboratory analysis based on field screening analysis with a PID. If no contamination is apparent, the previously-sampled intervals where contamination had been detected will be used to evaluate the effectiveness of the remedial action. Samples will be collected, preserved and submitted for analysis by an Illinois certified laboratory to confirm the results of field screening in accordance with SW 846 Method 5035. Soil samples will be analyzed for volatile organic compounds (VOCs) using SW 846 Method 8260B in accordance with Title 35 IAC 740.415 (d)(3)(4)(5). The confirmation sampling plan is illustrated in Figure 6.

8.1.4 Additional Well Survey

In accordance with 35 IAC 742.805(4) and 742.810(b)(1), the contaminants of concern must meet the applicable Tier 1 Groundwater Remediation Objective within the minimum or designated maximum setback zone of an existing potable water supply well. The minimum setback zone of a potable water supply well is 200 feet.

Groundwater modeling using Equation R26 indicates the potential for migration of VC up to 351 feet (the maximum migration distance for all contaminants of concern). In accordance with 35 IAC

810(b)(1), the minimum setback zone of the nearest potable water supply is 200 feet from the edge of the contaminant plume. However, following the remedial action, R26 modeling will be conducted to verify the potential extent of migration for all contaminants of concern.

To verify the location of potable water supply wells potentially located within the minimum setback zone, an additional well survey will be conducted. To date the well record databases are those provided by EDR. It is proposed that an additional search be conducted to include:

- Illinois State Geologic Survey
- Illinois State Water Survey
- Illinois Department of Public Health
- Illinois EPA Division of Public Water Supply
- McHenry County Health Department
- City of McHenry
- The IEPA SWAP database will be used to search for private, public and community wells

8.1.5 Engineered Barriers and Institutional Controls

The use of engineered barriers and institutional controls will restrict exposure to the soil and groundwater contamination remaining after the remedial action. Deed restrictions and Environmental Land Use Controls (ELUCs) will be implemented to restrict the Site to specific land use and to restrict installation and use of potable groundwater.

It is proposed that groundwater remediation objectives be achieved through the implementation of Institutional Controls. Institutional Controls will consist of ELUCs with the affected neighboring property owners.

8.1.6 Environmental Land Use Control

A groundwater use deed restriction may be obtained for one or more off-site private properties that could potentially be impacted by the contamination. The Institutional Control would be in the form of an Environmental Land Use Control (ELUC) to impose land use limitations or requirements related to the contamination. Adjacent properties are currently zoned industrial/commercial. The remedial action for adjacent properties may include the use of ELUCs as Institutional Controls to restrict the neighboring properties to industrial/commercial use. Where applicable, the Institutional Controls in the form of deed restrictions will also use the City of McHenry groundwater ordinance to restrict the installation of groundwater extraction wells and use of groundwater for potable water. The City of McHenry groundwater ordinance is currently not approved by the IEPA because it does not address existing wells. As such, the use of the deed restrictions in the form of ELUCs may be required to exclude potential exposure pathways to soil and groundwater contamination for these properties. The actual number of properties requiring ELUCs will be determined by modeling PCE based on any remaining contamination once the remedial action is completed.

Once the ELUC is approved by the Illinois EPA and property owner the ELUC will be recorded with the County Registrars Office with the chain of title for the property. An executed copy of the ELUC will be submitted with the Remedial Action Completion Report. The off-site properties that would require a deed restriction would be properties within the boundary of the modeled groundwater exceedances. The ELUCs would be developed and executed following the remedial action.

8.2 Current and Post Remediation Use of the Property

Current and post-remediation use of the property will remain the same. Property owners have indicated retail/commercial businesses will occupy the Site. There are no anticipated changes of the site layout. The post-remediation use of the property may be limited if engineered barriers and/or institutional controls are required for the Site to obtain a NFR Letter following the remediation. However, the limitations will not affect the property from existing under its current conditions. The potential limitations of a institutional control or engineered barrier would be defined following the remedial action and included in the No Further Remediation Letter.

9.0 PROJECT SCHEDULE

Assuming that any permits can be readily obtained and that the Bioremediation using HRC can access all contamination exceeding the site remediation objectives, the remediation project can be completed in approximately a 1.5 to 2 years following approval of the RAP. Initial steps include coordination and implementation of the pilot test, and upon successful completion of the pilot, implementation of the full scale treatment system. If there are unforeseen delays or if additional HRC injection is needed to treat residual contamination, the project will take longer. Since the amount of residual contamination, if any, cannot be known at this time, we can not estimate the amount of additional time that may be required to complete the project if the designed injections do not attain the proposed remedial objectives.

We anticipate that the Corrective Action Completion Report will be submitted approximately 4 to 6 weeks following the completion of remedial action and post-remediation confirmation sampling. We also anticipate the Illinois EPA will issue a No Further Remediation Letter for the Site within 120 after submittal of the Corrective Action Completion Report, assuming that the remedial objectives are achieved and all required ELUCs are executed.

10.0 CONCLUSIONS AND RECOMMENDATIONS

The property located at 3004 West Elm Street, McHenry, Illinois is currently occupied by Enterprise Rental Car. Inverse Investments has retained Northern Environmental Technologies, Incorporated to prepare a Remedial Objectives Report and Remedial Action Plan for the Site. Northern Environmental has prepared this Remedial Action Plan to address chlorinated solvent contamination at the Site. The goal of the Remedial Action Plan is to determine the best remedial method for the Site and obtain Illinois EPA approval to implement the plan. The goal of the remedial action will be to implement the approved Remedial Action Plan in order to meet the remedial objectives that have been established in Section 6.0 of this report and to obtain an NFR Letter for the Site. This report meets the requirements of the Illinois Environmental Protection Agency for a Remedial Objectives Report and Remedial Action Plan.

The following four remedial options were evaluated for the Site.

- Excavation, Transportation and Disposal
- iSOC
- Bioremediation using HRC
- Chemical Oxidation using RegenOx

Accelerated Bioremediation using HRC injection has been selected as the remedial option for the Site for the following reasons.

- Bioremediation using HRC is a cost effective remedial option.
- Bioremediation is relatively simple to design and implement.
- Minimal disruption to site operations.

The following are notable criteria for the design and implementation of the remedial action.

- It is assumed one application of HRC will be needed
- Application of the technology will consist of installing 8 injection wells.

Following the injection of the HRC solution, additional boreholes will be drilled and sampled, and existing monitoring wells sampled, to confirm the reduction of contaminants in the subsurface soils and groundwater.

The remedial objectives and remedial action plan developed by Northern Environmental, as well as the conclusions drawn and recommendations proposed, are based upon interpretation of the information available to Northern Environmental at the time of these activities. Northern Environmental assumes that the information provided by cited references is complete and correct. Northern Environmental believes that this report, remedial investigative work conducted, conclusions, and recommendations are consistent with Title 35 IAC 740.

11.0 REFERENCES

Green Environmental Group, Ltd., "Focused Site Investigation Report, October 3, 2003"

Miller-Butler Environmental Consulting, LLC "Supplemental Site Investigation Report," March 1, 2006

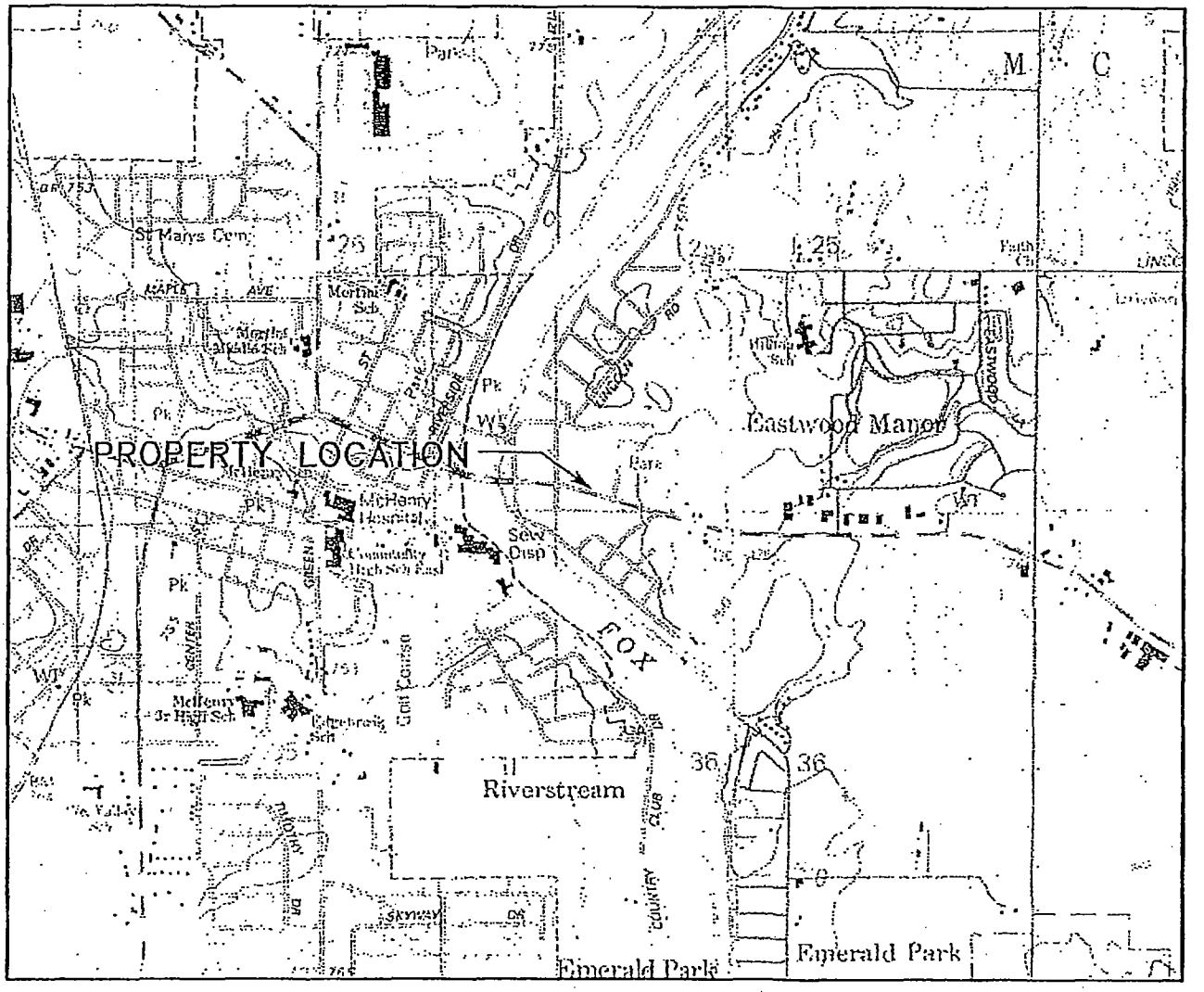
Illinois Environmental Protection Agency, "Groundwater Quality", Illinois Administrative Code, Part 620.

Illinois Environmental Protection Agency, "Site Remediation Program", Illinois Administrative Code, Part 740.

Illinois Environmental Protection Agency, "Tiered Approached to Corrective Action Objectives", Illinois Administrative Code, Part 742.

United States Geological Survey (USGS), Springfield, Illinois, 7.5 Minute Quadrangle Topographic Map, 1993.

FIGURES



SCALE IN FEET

1" = 2000'

0 1000 2000 3000 4000 5000 6000 7000 8000

CONTOUR INTERVAL 10 FEET

NATIONAL GEODETIC VERTICAL DATUM

N

QUADRANGLE LOCATION

Northern Environmental SM
Hydrologists · Engineers · Surveyors · Scientists
647 ACADEMY DRIVE, NORTHBROOK, ILLINOIS
Phone: 888-680-8101 Fax 847-562-8552
WISCONSIN ▲ MICHIGAN ▲ ILLINOIS ▲ IOWA

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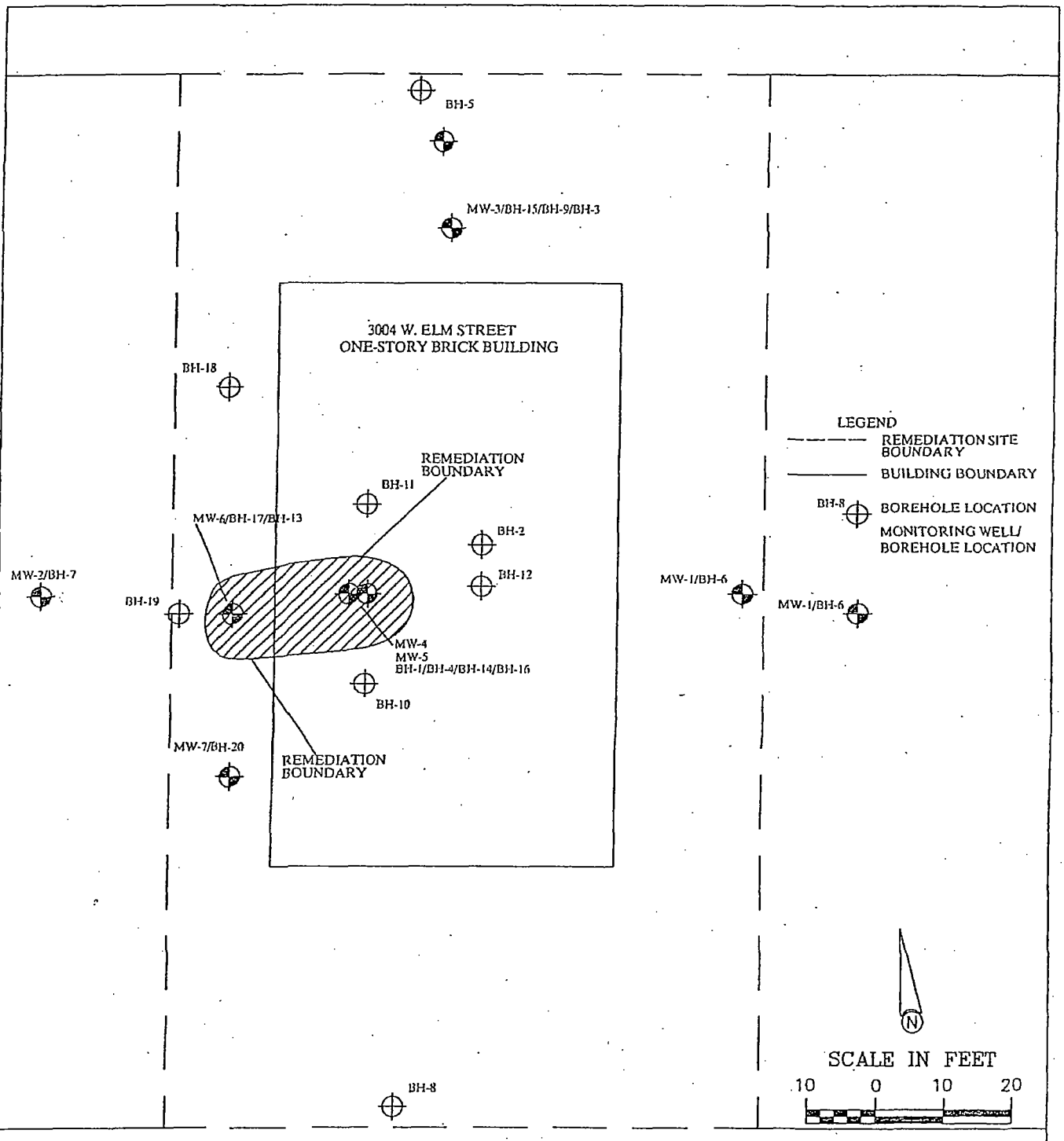
DRAWN BY: DMS	
REVISION DATE: 00/00/00	

SITE LOCATION & LOCAL TOPOGRAPHY

INVERSE INVESTEMENTS, LLC
3004 WEST ELM STREET
MCHENRY, ILLINOIS

PROJECT NUMBER: INV 05-2300-0572 | FIGURE 1



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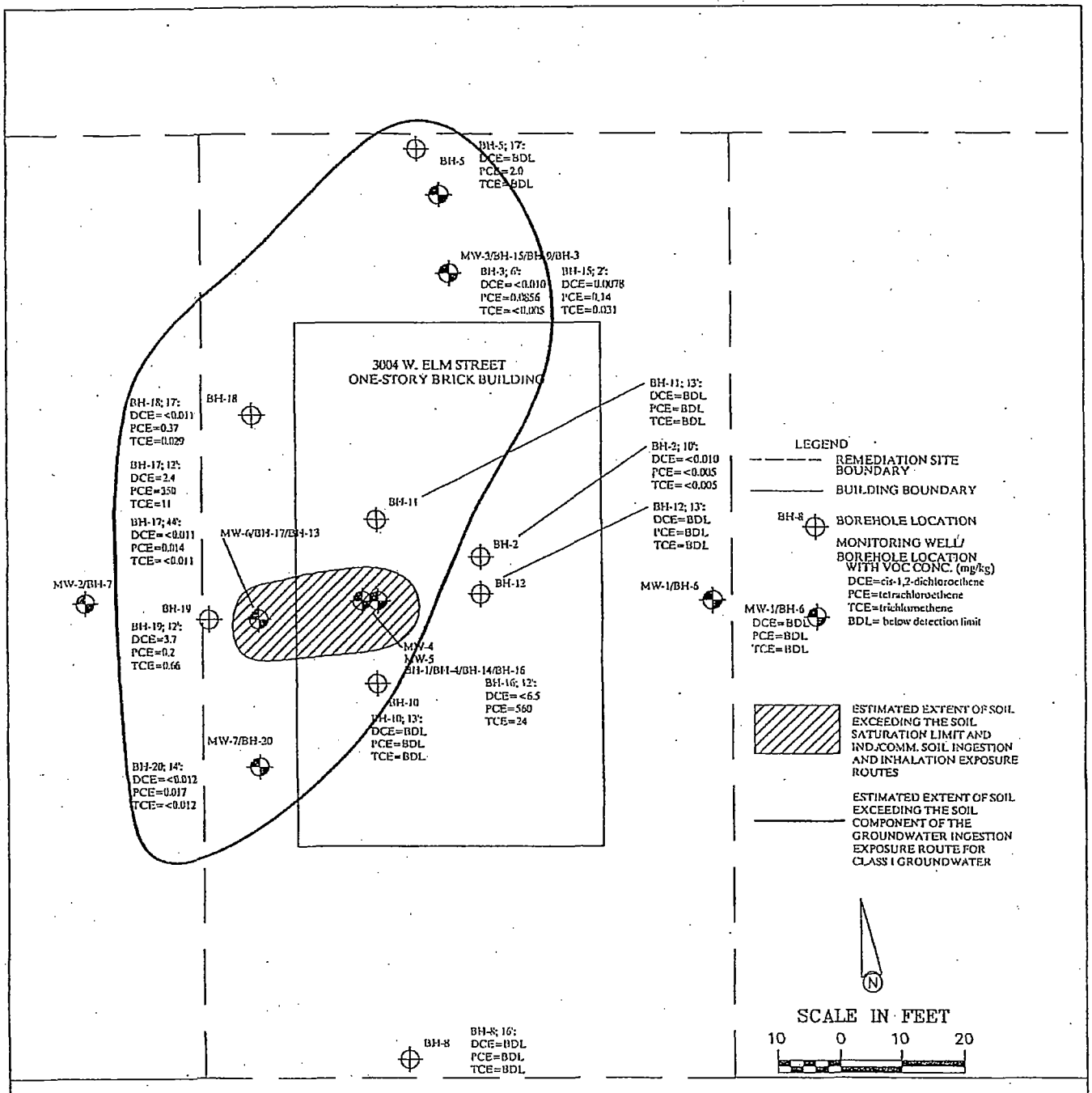
REMEDIATION SITE MAP

INVERSE INVESTEMENTS, LLC
3004 WEST ELM STREET
MCHENRY, ILLINOIS

DATE: 01/18/07	DRAWN BY: MCB	TASK NUMBER: XXX	PROJECT NUMBER: INV 05-2300-0572	FIGURE 2



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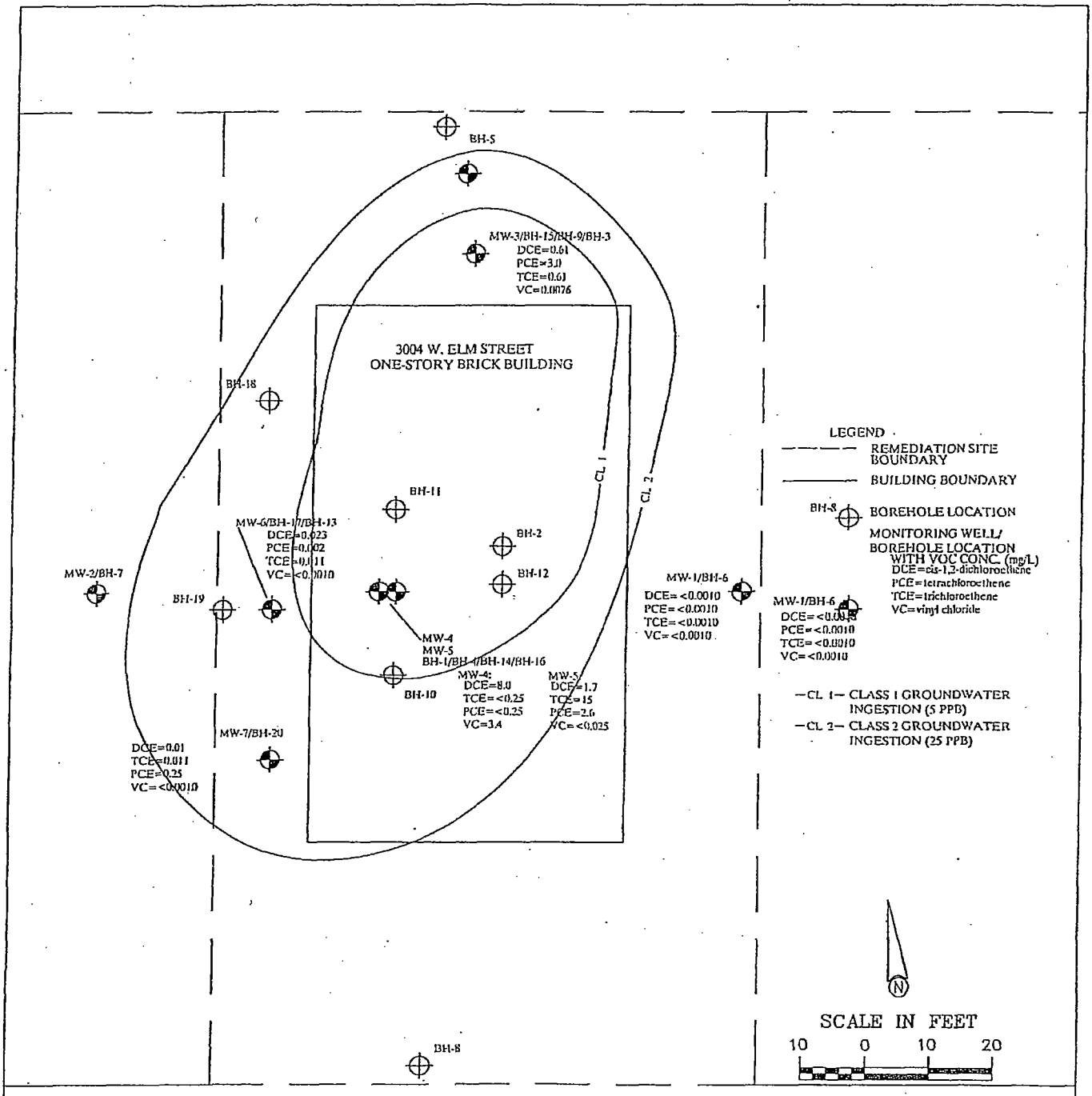
ESTIMATED EXTENT OF VOC CONTAMINATION IN SOIL

INVERSE INVESTMENT, LLC
3004 WEST ELM STREET
MCHENRY, ILLINOIS

DATE: 01/18/07	DRAWN BY: MCB	TASK NUMBER: XXX	PROJECT NUMBER: INV 05-2300-0572	FIGURE 3



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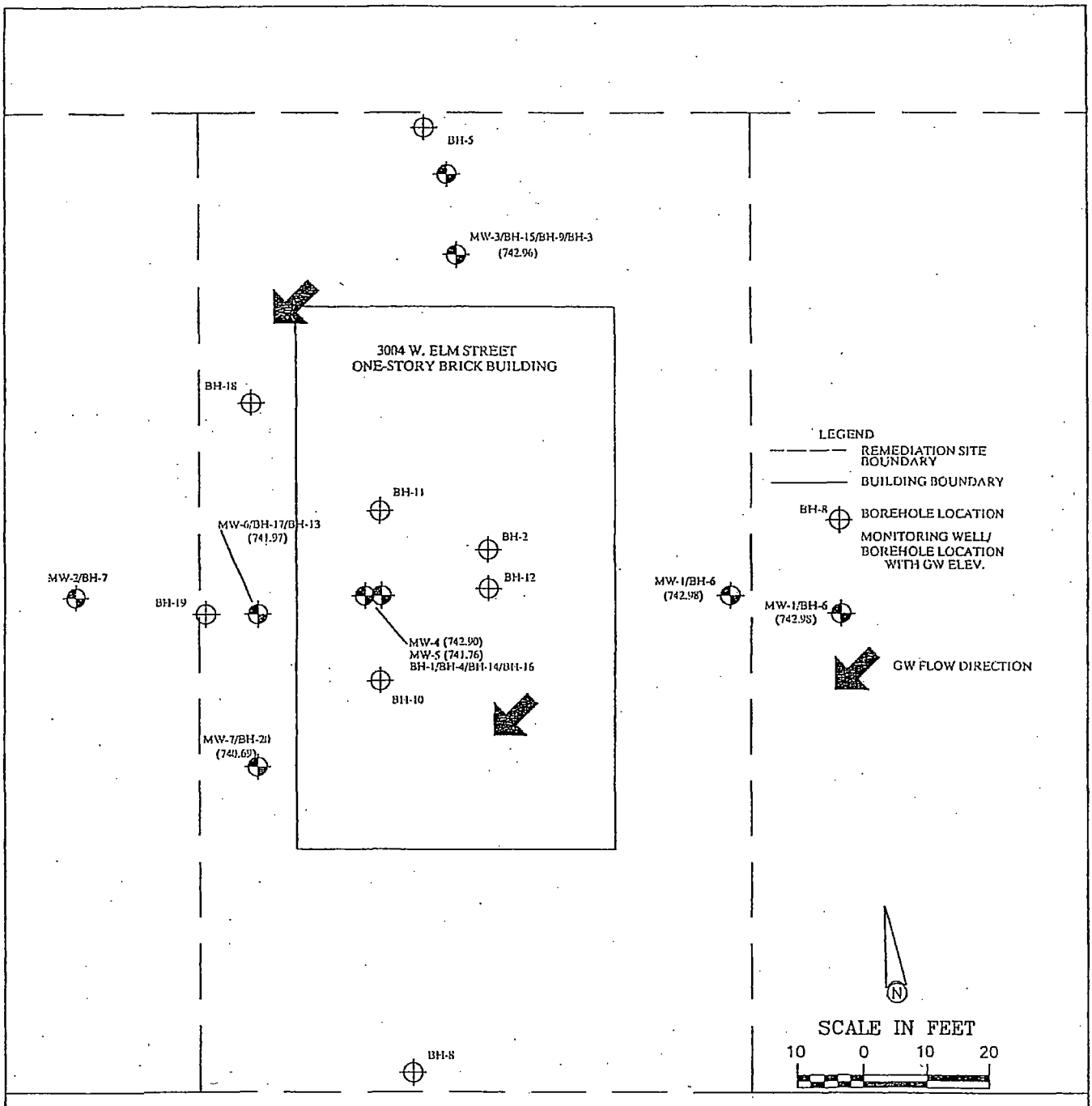
ESTIMATED EXTENT OF VOC CONTAMINATION IN GROUNDWATER

INVERSE INVESTEMENTS, LLC
3004 WEST ELM STREET
MCHENRY, ILLINOIS

DATE: 01/18/07	DRAWN BY: MCB	TASK NUMBER: XXX	PROJECT NUMBER: INV 05-2300-0572	FIGURE 4



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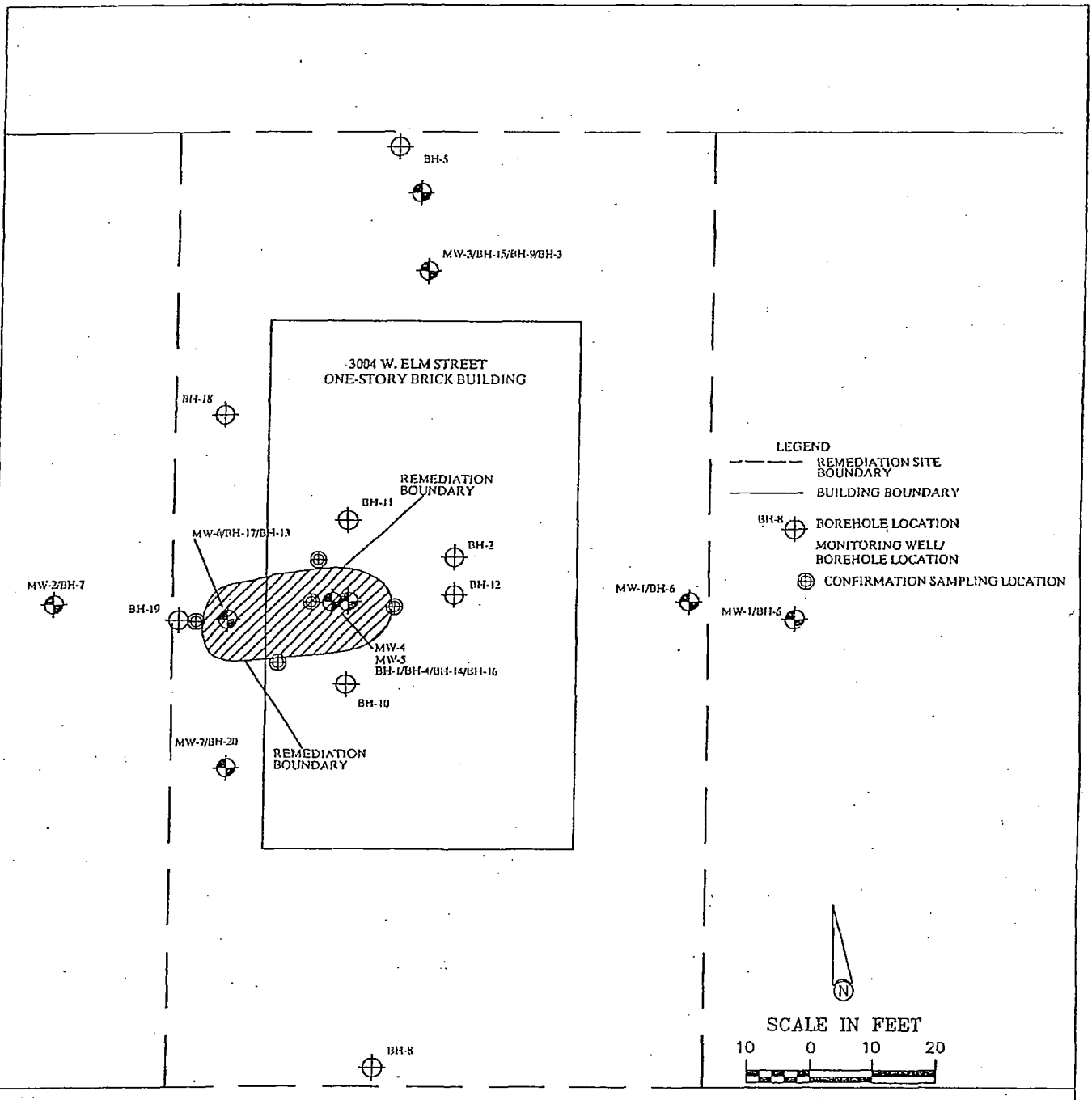
GROUNDWATER FLOW MAP
FEBRUARY 17, 2006

INVERSE INVESTMENTS, LLC
3004 WEST ELM STREET
MCHENRY, ILLINOIS

DATE: 01/18/07	DRAWN BY: MCB	TASK NUMBER: XXX	PROJECT NUMBER: INV 05-2300-0572	FIGURE 5



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CONFIRMATION SAMPLING PLAN

INVERSE INVESTEMENT, LLC
3004 WEST ELM STREET
MCHENRY, ILLINOIS

DATE: 01/19/07	DRAWN BY: DMS	TASK NUMBER: XXX	PROJECT NUMBER: INV 05-2300-0572	FIGURE 6

TABLES

Table 1
Groundwater Table Elevation Data
Inverse Investement, LLC
3004 West Elm, McHenry, IL

Well No.	Ground Surface Elevation	Riser Elevation	Date	Depth to Groundwater	Groundwater Elevation
MW-1	749.91	749.73	10/17/02	6.67	743.06
			2/17/06	6.75	742.98
			11/13/06	5.78	743.95
MW-2	750.42	749.94	10/17/02	7.13	742.81
			2/17/06	NA	NA
			11/13/06	NA	NA
MW-3	750.14	749.84	10/17/02	6.80	743.04
			2/17/06	6.88	742.96
			11/13/06	7.21	742.63
MW-4	750.27	749.93	1/16/03	7.68	742.25
			2/17/06	7.03	742.90
			11/13/06	6.28	743.65
MW-5	750.27	749.84	1/16/03	8.00	741.84
			2/17/06	8.08	741.76
			11/13/06	7.19	742.65
MW-6	750.38	749.79	-	-	-
			2/17/06	7.82	741.97
			11/13/06	7.08	742.71
MW-7	750.46	749.79	-	-	-
			2/17/06	9.1	740.69
			11/13/2006	7.14	743.32

Table 2
Soil Analytical Results - Detected VOCs
Inverse Investement, LLC
3004 West Elm, McHenry, IL

Compounds of Concern										
TIER 1 INDUSTRIAL/COMMERCIAL SOIL REMEDIATION OBJECTIVES			Acetone (mg/kg)	Benzene (mg/kg)	Carbon Disulfide (mg/kg)	cis-1,2-Dichloroethene (mg/kg)	Ethylbenzene (mg/kg)	Tetrachloroethene (mg/kg)	Trichloroethene (mg/kg)	Total Xylenes (mg/kg)
Mig. to Class I Groundwater			16	0.03	32	0.4	13	0.06	0.06	150
Mig. to Class II Groundwater			16	0.17	160	1.1	19	0.3	0.3	150
Soil Inhalation			100000	1.6	720	1200	400	20	8.9	320
Soil Inhalation (CW)			100000	2.2	9	1200	58	28	12	320
Soil Ingestion			200000	100	200000	20000	200000	110	520	1000000
Sample Location	Sample Date	Sample Depth								
BH-15	11/16/2005	2'	0.062	0.0015	0.0015	0.0078	0.0012	0.14	0.031	0.0038
BH-16	11/16/2005	12'	<160	<6.5	<6.5	<6.5	<6.5	560	24	<19.
BH-17	11/16/2005	12'	<12.	<0.48	<0.48	2.4	<0.48	350	11	<1.4
BH-17	11/16/2005	3'	0.52	<0.0011	<0.0011	<0.0011	<0.0011	0.0052	<0.0011	<0.0034
BH-17	11/16/2005	44'	0.22	<0.0011	<0.0011	<0.0011	<0.0011	0.014	<0.0011	<0.0034
BH-18	11/16/2005	17'	<0.028	0.0011	<0.0011	0.0067	<0.0011	0.37	0.029	<0.0034
BH-19	11/16/2005	12'	7.2	<0.040	<0.040	3.7	<0.040	0.2	0.66	<0.12
BH-20	11/16/2005	14'	0.38	<0.0012	<0.0012	<0.0012	<0.0012	0.0017	<0.0012	<0.0036

Notes:
1) mg/kg = milligrams per kilogram
2) SRO = Soil Remediation Objective
3) Bold = Analytical result exceeds the most restrictive Tier 1 SRO
4) BDL or <0.002 = Concentration was not detected above the laboratory detection limit
5) N = No toxicity criteria is available for the route of exposure
6) NA = SRO not listed in 35 IAC Part 742
7) CW = Construction Worker
8) Shaded = Exposure Route SRO has been exceeded by analytical result

Table 3
Groundwater Analytical Results - Detected VOCs
Inverse Investement, LLC
3004 West Elm, McHenry, IL

		Compounds of Concern				
TIER 1 GROUNDWATER REMEDIATION OBJECTIVES		1,1-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl chloride
Class I Groundwater		0.007	0.07	0.005	0.005	0.002
Class II Groundwater		0.035	0.2	0.025	0.025	0.01
Monitoring Well ID	Date					
MW-1	1/19/2006	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	11/14/2006	<0.002	<0.002	<0.002	<0.002	<0.002
MW-3	1/19/2006	<0.0050	0.61	3	0.61	0.0076
MW-4	1/19/2006	<0.25	8	<0.25	<0.25	3.4
MW-5	1/19/2006	<0.025	1.7	15	2.6	<0.025
	11/14/2006	0.0183	9.53	0.954	0.772	5.28
MW-6	1/19/2006	<0.0010	0.023	0.002	0.011	<0.0010
MW-7	1/19/2006	<0.0010	0.01	0.011	0.25	<0.0010
Duplicate	11/14/2006	0.019	9.33	0.911	0.757	4.76
Triplicate	11/14/2006	<0.002	<0.002	<0.002	<0.002	<0.002

Notes:
1) mg/kg = milligrams per kilogram
2) GRO = Groundwater Remediation Objective
3) Bold = Analytical result exceeds the bolded Tier 1 GRO
4) BDL or <0.002 = Concentration was not detected above the laboratory detection limit
5) N = No toxicity criteria is available for the route of exposure
6) NA = SRO not listed in 35 IAC Part 742
7) CW = Construction Worker
8) Shaded = Exposure Route SRO has been exceeded by analytical result

Table 4: Summary of Tier I and Tier II Remediation Objectives, 3004 West Elm Street, McHenry, Illinois

Exposure Routes		Compounds and Observed Maximum Concentrations in mg/kg							
		PCE Maximum. Conc.= mg/kg		TCE Maximum Conc. = mg/kg		Cis 1,2 DCE Maximum Conc.= mg/kg		Vinyl Chloride Maximum Conc.= mg/kg	
		Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2
SSL Soil Componant of Groundwater Remedial Objectives		0.06		0.06		0.4		0.01	
Industrial Commerial Remedial Objectives	Soil Ingestion	110		520		20,000		7.9	
	Soil Inhalation	20		8.9		1,200		1.10	
Construction Worker Remedial Objectives	Soil Ingestion	2400		1200		20,000		170	
	Soil Inhalation	28		12		1200		1.10	
Soil Saturation Limit		240		1300		1200		1200	

Notes:
1. All concentration above are in mg/kg.
2. Bolded numbers are the applicable remedial objectives
= Tier II Remedial Objectives were not developed.

Table 5 Results of Equation R26 Calculations, Inverse Investements, LLC, McHenry, Illinois

Compound	Center of Source Location	C source (mg/L)	Class I Objective (mg/l)	Distance to Class I Objective (feet)
Tetrachloroethylene	MW 5	0.954	0.005	77.60
Trichloroethylene	MW 5	0.772	0.005	135.40
Cis 1,2 Dichloroethylene	MW 5	9.53	0.07	191.55
Vinyl Chloride	MW 5	5.28	0.002	351.05
1,1-Dichloroethylene	MW 5	0.0183	0.007	2.31

Notes:

Class I objective = The Tier I Class I ground water remedial objective

Distance to Class I objective = The maximum distance a compound will migrate in ground water from the source area

C source = The concentration observed in groundwater at the Site

Table 6. Engineers Opinion of Project Costs, Inverse Investements, LLC, McHenry, Illinois

(This table is not intended for budgeting purposes, but is to be used only for relative cost comparison)

	Option 1 Chemical Oxidation with RegenOX	Option 2 Accelerated Bioremediation with HRC Advanced
Pilot Test or Bench Scale Study or Preliminary Testing		
Engineering Costs		
Illinois EPA/Client/Contractor Coordination	$3,000.00	$3,000.00
Work/Sampling Plan	$2,500.00	$2,500.00
Permitting	$600.00	$600.00
Final Design, Drawings and Specifications	$4,000.00	$4,000.00
Bidding and Negotiation	$1,000.00	$1,000.00
Construction Phase		
Installation	$12,000.00	$4,000.00
Coordination	$3,000.00	$1,500.00
System Operation and Maintenance/Monitoring	$7,500.00	$8,000.00
Corrective Action Completion Report	$5,000.00	$5,000.00
Subtotal	$38,600.00	$29,600.00
Contractor Costs		
Contractor Workplan Preparation	$0.00	$0.00
Extraction/Injection Well System Equipment & Installation	$0.00	$0.00
System Installation/Application	$12,927.00	$4,000.00
System Operation	$0.00	$0.00
Electrical/Gas Hookup	$0.00	$0.00
Remedial Equipment Rental Fees	$1,000.00	$1,000.00
Chemical Injection Well Installation	$0.00	$0.00
Chemical-Oxidizer / HRC	$14,039.00	$6,125.00
Soil Drum Disposal	$0.00	$0.00
Energy Costs	$0.00	$0.00
O&M Lab Analysis	$4,000.00	$4,800.00
Subtotal	$31,966.00	$15,925.00
Confirmation Sampling/Testing		
One Round (5 boreholes, 2 wells)		
Engineering	$1,500.00	$1,500.00
Equipment	$1,500.00	$500.00
Laboratory	$2,520.00	$840.00
Drilling	$3,000.00	$3,000.00
Subtotal	$8,520.00	$5,840.00
TOTALS	$79,086.00	$51,365.00

Notes:

1. System Operation and Maintanence Cost is for one year for Bioremediation.
2. RegenOX injection costs for unaccessible contamination are not included.
3. RegenOX cost is for three applications
4. Cost for Bioremediation parameter analysis is not included in operation and maintanence
5. Cost for VOC analysis for 2 two groundwater samples is included in operation and maintanence for Bioremediation and RegenOX

APPENDICES

RBCA EQUATION R26 FOR THE GROUNDWATER INGESTION EXPOSURE ROUTE

Dissolved Concentration Along the Centerline of the Plume in the direction of the Nearest Point of Concern

INVERSE INVESTMENTS, LLC
3004 W. ELM STREET, MCHENRY, IL
INV 05-2300-0572

Csource (mg/L)	X (cm)	σx (cm)	σy (cm)	σz (cm)	λ (1/day)	K (cm/d)	I (cm/cm)	θ) (cm^3/cm^3 soil)	U (cm/d)	Sw (cm)	Sd (cm)	Error Term 1	Error Term 2	erf1	erf2	C(x) (mg/L)	Tier 1 GRO (mg/L)
0.954	2350	235	78.3333333	11.75	0.00096	9.35	0.0146	0.43	0.31746512	3201.84	200	1.91810108	0.60179301	0.083224	0.605266	0.00471481	0.005
0.772	4100	410	136.666667	20.5	0.00042	9.35	0.0146	0.43	0.31746512	3291.84	200	1.00003004	0.34403014	0.860003	0.374312	0.00513809	0.005
9.53	5800	580	193.333333	29	0.00024	9.35	0.0146	0.43	0.31746512	3201.84	200	0.77710105	0.24383803	0.726304	0.269778	0.00023502	0.07
5.28	10700	1070	356.666667	53.5	0.00024	9.35	0.0146	0.43	0.31746512	3201.84	200	0.42126519	0.13218049	0.455482	0.14706	0.00170346	0.002
0.0103	70	7	2.33333333	0.35	0.0053	9.35	0.0146	0.43	0.31746512	3201.84	200	84.3933037	20.2030509	1	1	0.00835968	0.007

	Source	Equation (if Applicable)
ncentration at the source.	Concentration measured at the Site	
centerline of the groundwater plume e point of compliance.	Site-specific Measurement	
dvity	35 IAC Part 742, Appendix C, Table C, Equation R16	R16: σx = 0.10*X
vity	35 IAC Part 742, Appendix C, Table C, Equation R17	R17: σy = σx/3
	35 IAC Part 742, Appendix C, Table C, Equation R18	R18: σz = σx/20
ion Constant	35 IAC Part 742, Appendix C, Table E; Chemical-Specific	
lity	Site-specific Field Measurement	
	Site-specific Field Measurement	
	Site-specific Field Measurement, or Default Value given in 35 IAC Part 742, Appendix C, Table B	
	35 IAC Part 742, Appendix C, Table C, Equation R19	R19: U = (K*I)/θ
ndicular to Groundwater Flow Direction ine	Site-specific Field Measurement	
ndicular to Groundwater Flow Direction t	Site-specific Field Measurement or defaults	
Function	35 IAC Part 742, Appendix C, Table G	
Function	35 IAC Part 742, Appendix C, Table G	

erf1((Sw/(4(σy*X)^0.5))*erf2(Sd/(2*σz*X)))

RBCA EQUATION R26 FOR THE GROUNDWATER INGESTION EXPOSURE ROUTE

Dissolved Concentration Along the Centerline of the Plume in the direction of the Nearest Point of Concern

INVERSE INVESTMENTS, LLC
3004 W. ELM STREET, MCHENRY, IL
INV 05-2300-0572

COC	Location	Direction of Point of Concern	Csource (mg/L)	X (cm)	σx (cm)	σy (cm)	σz (cm)	λ (1/day)	K (cm/d)	I (cm/cm)	θT [cm^3/cm^3 soil]	U (cm/d)	Sw (cm)	Sd (cm)	Error Term 1	Error Term 2	erf1	erf2	C(x) (mg/L)	Tier 1 GRO (mg/L)
Tetrachloroethylene	MW-5	SW-downgradient	0.954	2350	235	78.3333333	11.75	0.00096	9.35	0.0146	0.43	0.31746512	3201.84	200	1.91810109	0.60170301	0.993324	0.605266	0.00471481	0.005
Trichloroethylene	MW-5	SW-downgradient	0.772	4100	410	136.666667	20.5	0.00042	9.35	0.0146	0.43	0.31746512	3291.84	200	1.0093004	0.344403014	0.880003	0.374312	0.00513809	0.005
cis-1,2-dichloroethylene	MW-5	SW-downgradient	9.53	5800	580	193.333333	29	0.00024	9.35	0.0146	0.43	0.31746512	3201.84	200	0.77716105	0.24382902	0.728264	0.280776	0.00073562	0.07
vinyl chloride	MW-5	SW-downgradient	5.78	10700	1070	356.666667	53.5	0.00024	9.35	0.0146	0.43	0.31746512	3201.84	200	0.42126519	0.13216040	0.455482	0.14706	0.00170346	0.002
1,1-dichloroethylene	MW-5	SW-downgradient	0.0183	70	7	2.33333333	0.35	0.0053	9.35	0.0146	0.43	0.31746512	3201.84	200	64.3933037	20.2030509	1	1	0.00035068	0.007

INPUT PARAMETERS:

Symbol	Units	Explanation	Source	Equation (if Applicable)
Csource	mg/L	COC groundwater concentration at the source.	Concentration measured at the Site	
x	cm	Distance along the centerline of the groundwater plume from the source to the point of compliance.	Site-specific Measurement	
αx	cm	Longitudinal Dispersivity	35 IAC Part 742, Appendix C, Table C, Equation R16	R16: αx = 0.10*X
αy	cm	Transverse Dispersivity	35 IAC Part 742, Appendix C, Table C, Equation R17	R17: αy = αx/3
αz	cm	Vertical Dispersivity	35 IAC Part 742, Appendix C, Table C, Equation R18	R18: αz = αx/20
λ	1/day	First Order Degradation Constant	35 IAC Part 742, Appendix C, Table E: Chemical-Specific	
K	cm/day	Hydraulic Conductivity	Site-specific Field Measurement	
I	cm/cm	Hydraulic Gradient	Site-specific Field Measurement	
θT	cm^3/cm^3 soil	Total Soil Porosity	Site-specific Field Measurement, or Default Value given in 35 IAC Part 742, Appendix C, Table B	
U	cm/day	Specific Discharge	35 IAC Part 742, Appendix C, Table C, Equation R19	R19: U = (K*I)/θT
Sw	cm	Source Width Perpendicular to Groundwater Flow Direction in the Horizontal Plane	Site-specific Field Measurement	
Sd	cm	Source Width Perpendicular to Groundwater Flow Direction in the Vertical Plane	Site-specific Field Measurement or default	
erf1	unitless	Mathematical Error Function	35 IAC Part 742, Appendix C, Table G	
erf2	unitless	Mathematical Error Function	35 IAC Part 742, Appendix C, Table G	

EQUATION R26:

C(x)=Csource*{exp({X/2αx}*{1-(1+{4λ*αx/U})^0.5})*erf1((Sw/(4*{αy*X}^0.5))*erf2(Sd/(2*αz*X))}

RBCA EQUATION R15 FOR THE SOIL COMPONENT OF THE GROUNDWATER INGESTION EXPOSURE ROUTE

Dissolved Concentration Along the Centerline of the Plume in the direction of the Nearest Point of Concern

INVERSE INVESTMENTS LLC
3004 W. ELM STREET, MCHENRY, IL
INV 05-2300-0572

COC	Location	Direction of Point of Concern	Csource (mg/L)	X (cm)	αx (cm)	αy (cm)	αz (cm)	λ (1/day)	K (cm/d)	I (cm/cm)	θT (cm^3/cm^3 soil)	U (cm/d)	Sw (cm)	Sd (cm)	Error Term 1	Error Term 2	erf1	erf2	C(x) (mg/L)	Tier 1 GRO (mg/L)
Tetrachloroethylene	BH-18	SW - downgradient	439.684265	73	7.3	2.43333333	0.365	0.00006	9.35	0.0146	0.43	0.31746512	2804.16	200	7.89311315	7.50609871	1	1	0.00438824	0.005
Trichloroethylene	BH-16	SW - downgradient	18.7700228	86	8.6	2.86666667	0.43	0.00042	9.35	0.0146	0.43	0.31746512	2804.16	200	5.68716228	5.40832883	1	1	0.00450888	0.005
Tetrachloroethylene	BH-17	SW - downgradient	274.602866	72	7.2	2.4	0.36	0.00006	9.35	0.0146	0.43	0.31746512	2804.16	200	8.11388689	7.71604938	1	1	0.00436034	0.005
Trichloroethylene	BH-17	SW - downgradient	8.6070521	83	8.3	2.76666667	0.415	0.00042	9.35	0.0146	0.43	0.31746512	2804.16	200	6.10573378	5.80835799	1	1	0.00484041	0.005
cis-1,2-Dichloroethylene	BH-19	SW - downgradient	0.40987028	98	9.8	3.26666667	0.49	0.00024	9.35	0.0146	0.43	0.31746512	2804.16	200	4.37987514	4.16403128	1	1	0.00548622	0.07
cis-1,2-Dichloroethylene	BH-19	SW - downgradient	9.88189722	100	10	3.33333333	0.5	0.00024	9.35	0.0146	0.43	0.31746512	2804.16	200	4.20824	4	1	1	0.00544598	0.07

INPUT PARAMETERS:

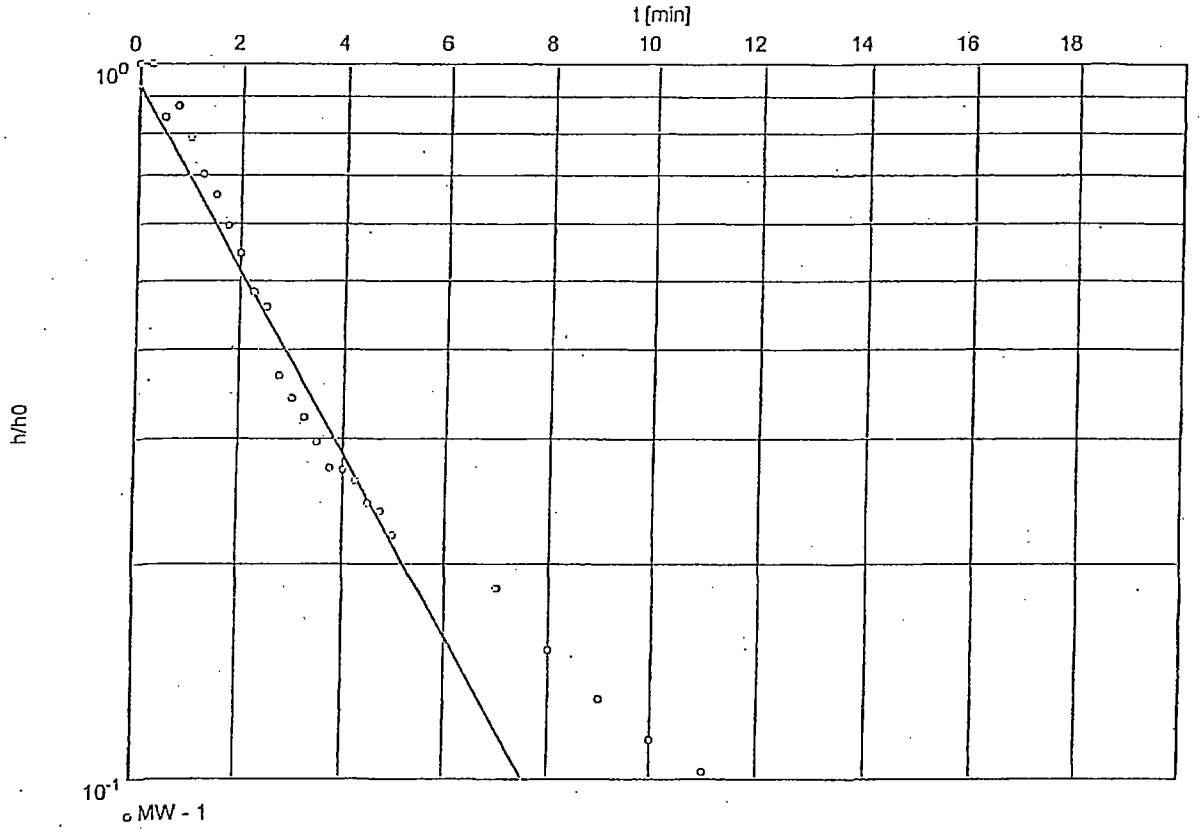
Symbol	Units	Explanation	Source	Equation (if Applicable)
Csource	mg/L	COC groundwater concentration at the source.	Equation R12/R14 Results	
X	cm	Distance along the centerline of the groundwater plume from the source to the point of compliance.	Site-specific Measurement	
αx	cm	Longitudinal Dispersivity	35 IAC Part 742, Appendix C, Table C, Equation R16	R16: αx = 0.10*X
αy	cm	Transverse Dispersivity	35 IAC Part 742, Appendix C, Table C, Equation R17	R17: αy = αx/3
αz	cm	Vertical Dispersivity	35 IAC Part 742, Appendix C, Table C, Equation R18	R18: αz = αx/20
λ	1/day	First Order Degradation Constant	35 IAC Part 742, Appendix C, Table E; Chemical-Specific	
K	cm/day	Hydraulic Conductivity	Site-specific Field Measurement	
I	cm/cm	Hydraulic Gradient	Site-specific Field Measurement	
θT	cm^3/cm^3 soil	Total Soil Porosity	Site-specific Field Measurement, or Default Value given in 35 IAC Part 742, Appendix C, Table B	
U	cm/day	Specific Discharge	35 IAC Part 742, Appendix C, Table C, Equation R19	R19: U = (K*I)/θT
Sw	cm	Source Width Perpendicular to Groundwater Flow Direction in the Horizontal Plane	Site-specific Field Measurement	
Sd	cm	Source Width Perpendicular to Groundwater Flow Direction in the Vertical Plane	Site-specific Field Measurement or defaults	
erf1	unitless	Mathematical Error Function	35 IAC Part 742, Appendix C, Table G	
erf2	unitless	Mathematical Error Function	35 IAC Part 742, Appendix C, Table G	

EQUATION R15:

C(x)=Csource*(exp((X/2αx)*(1-(1+(4λ*αx/U))^0.5)*erf1((Sw/(4*(αy*X)^0.5))*erf2(Sd/(2*αz*X)))

180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	BOUWER-RICE's method	Project: INV 05-2300-0572	
		Evaluated by: DMS	Date: 17.01.2007

Slug Test No. Test # 1	Test conducted on: 14/11/06
MW - 1	



Hydraulic conductivity [ft/min]: 2.10×10^{-4}

180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	BOUWER-RICE's method	Project: INV 05-2300-0572	
		Evaluated by: DMS	Date: 17.01.2007

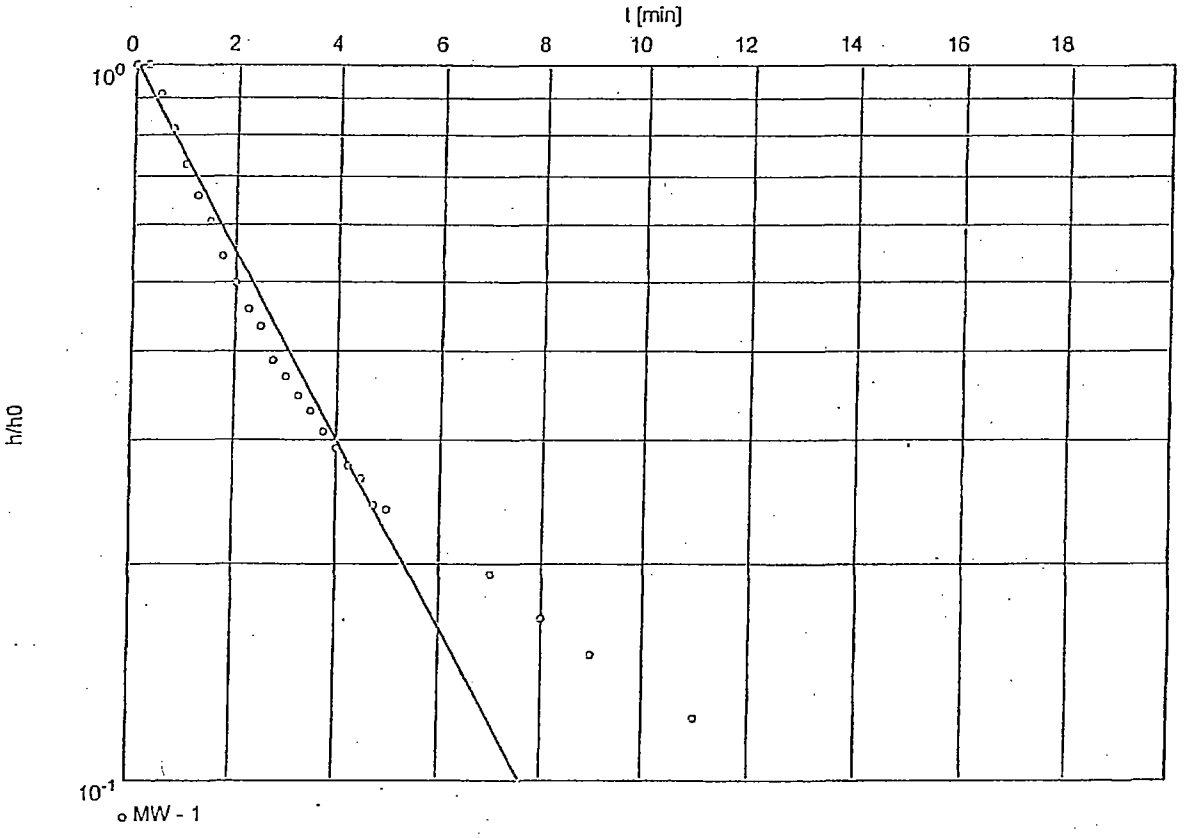
Slug Test No. Test # 1	Test conducted on: 14/11/06
MW - 1	MW - 1

Static water level: 5.86 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
1	0.00	12.20	6.34	
2	0.25	12.20	6.34	
3	0.50	11.20	5.34	
4	0.75	11.39	5.53	
5	1.00	10.86	5.00	
6	1.25	10.31	4.45	
7	1.50	10.03	4.17	
8	1.75	9.64	3.78	
9	2.00	9.32	3.46	
10	2.25	8.92	3.06	
11	2.50	8.78	2.92	
12	2.75	8.19	2.33	
13	3.00	8.03	2.17	
14	3.25	7.90	2.04	
15	3.50	7.74	1.88	
16	3.75	7.59	1.73	
17	4.00	7.58	1.72	
18	4.25	7.52	1.66	
19	4.50	7.40	1.54	
20	4.75	7.36	1.50	
21	5.00	7.25	1.39	
22	7.00	7.03	1.17	
23	8.00	6.82	0.96	
24	9.00	6.68	0.82	
25	10.00	6.58	0.72	
26	11.00	6.51	0.65	

180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	BOUWER-RICE's method	Project: INV 05-2300-0572	
		Evaluated by: DMS	Date: 17.01.2007

Slug Test No. Test # 2	Test conducted on: 14/11/06
MW - 1	



Hydraulic conductivity [ft/min]: 2.16×10^{-4}

180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	BOUWER-RICE's method	Project: INV 05-2300-0572	
		Evaluated by: DMS	Date: 17.01.2007

Slug Test No. Test # 2	Test conducted on: 14/11/06
MW - 1	MW - 1

Static water level: 5.86 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
1	0.00	11.35	5.49	
2	0.25	11.35	5.49	
3	0.50	10.86	5.00	
4	0.75	10.34	4.48	
5	1.00	9.85	3.99	
6	1.25	9.47	3.61	
7	1.50	9.19	3.33	
8	1.75	8.84	2.98	
9	2.00	8.60	2.74	
10	2.25	8.38	2.52	
11	2.50	8.24	2.38	
12	2.75	7.99	2.13	
13	3.00	7.88	2.02	
14	3.25	7.76	1.90	
15	3.50	7.67	1.81	
16	3.75	7.55	1.69	
17	4.00	7.46	1.60	
18	4.25	7.37	1.51	
19	4.50	7.31	1.45	
20	4.75	7.19	1.33	
21	5.00	7.17	1.31	
22	7.00	6.92	1.06	
23	8.00	6.78	0.92	
24	9.00	6.68	0.82	
25	11.00	6.53	0.67	

C

EXHIBIT C

Northern Environmental Technologies, Inc.
July 16, 2007 Letter to IEPA
with Attachment A: R26 Calculation and Figure

Northern Environmental
Hydrologists · Engineers · Surveyors · Scientists

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July 16, 2007
(P/N: 05-2300-0572)

Mr. Andrew Catlin, L.P.G.
Project Manager
Voluntary Site Remediation Unit
Remedial Project Management Section
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794

Re: LPC#1110605163-McHenry County
Inverse Investments, LLC
Site Remediation Technical Reports

Dear Mr. Catlin:

Northern Environmental Technologies Inc., (Northern Environmental) has received Illinois EPA's comments dated June 13, 2007 in response to our letter dated June 7, 2007. Based on our follow-up discussion between the IEPA and Northern Environmental on June 21st we have the following response.

1. *Investigation*: EPA has requested that Inverse Investments consider investigating the rate and extent of off-site groundwater contamination. This may be achieved through the installation of 1-2 groundwater monitoring wells down gradient from the site. Once the ROR/RAP is approved and the remedial action is completed, confirmation sampling will be conducted to determine the remaining concentration of contaminants and to determine whether remediation objectives have been achieved. During the confirmation sampling, Inverse Investments will consider the installation of 1-2 groundwater monitoring wells to collect groundwater samples for laboratory analysis.

2. *Water Well Survey:* In a conversation with Illinois EPA on June 21, 2007, the EPA requested Inverse Investments model the potential distance PCE can migrate based on the proposed remediation objective of 240 ppm. Groundwater modeling using Equation R26 indicates the potential for off-site migration of PCE is estimated to be 182 feet. The R26 calculation and the distance PCE can migrate is shown on the attached figure.

   During the conversation, EPA concurred that the final concentration of PCE remaining may be lower than Csat once remedial action is completed. As such, the travel distance before compliance with Tier Groundwater objectives is met may be less than 182 feet. It was agreed that a revised R26 calculation will be prepared based on the remaining soil concentration.

   In accordance with 35 IAC 742.805(4) and 742.810(b)(1), the contaminants of concern must meet the applicable Tier 1 Groundwater Remediation Objective within the minimum or designated maximum setback zone of an existing potable water supply well. The minimum setback zone of a potable water supply well is 200 feet. In accordance with Illinois EPA's request, Inverse Investments will conduct a water well survey to determine the potential

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presence of potable groundwater water within 200 feet of the edge of the groundwater contaminant plume. This search will include a SWAP database search including sources noted in EPA's letter. In addition to the SWAP search, a well survey will be conducted. The survey will consist of a mailing to residences and business requesting information regarding the presence/absence of potable water wells and if present, how wells are currently used on the property. If necessary, a second mailing will be sent to residents/businesses that did not respond to the initial mailing. Following the second mailing, a door to door survey will be conducted to residents/businesses that did not respond to either mailing. During the door to door survey and site reconnaissance will be conducted to visually determine the potential presence/absence of wells in the area. The findings of the door to door search will be documented on a form developed for the survey and will include the date, time, person conducting the inspection, presence of any wells including type of well, capacity and date of installation. The water well survey will be signed by personnel conducting the inspection. For the door to door survey, Inverse Investments may solicit the assistance of the City of McHenry Department of Public Works. Data collected during the survey and SWAP search will be presented in the Remedial Action Completion Report.

3. *Quarterly Groundwater Sampling:* In response to EPA's comments regarding quarterly groundwater sampling, groundwater samples will be collected from down gradient wells.

4. *Confirmation Soil Sampling:* In response to EPA's request, confirmation samples will be collected at points equidistant between injection points. It is proposed that samples be collected from an interval with the highest PID detected during installation of the injection wells.

We trust we have adequately addressed Illinois EPA's comments and request that the Illinois EPA approve the ROR/RAP. Following approval of the RAP, Inverse Investments will proceed with planning and scheduling the remedial action. If you have any questions or need additional information, please call me at (847) 562-8577.

Sincerely,
Northern Environmental Technologies, Inc.

M. Paul Karalius
Project Manager

cc. Inverse Investments, LLC
Jennifer Nijman, Winston & Strawn

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ATTACHMENT A

R26 CALCULATION AND FIGURE

RBCA EQUATIONS R12 and R14 FOR THE RESIDENTIAL SOIL COMPONENT OF THE GROUNDWATER INGESTION EXPOSURE ROUTE

Tier 2 Soil Leaching Calculations for the Soil Component of the Groundwater Ingestion Exposure Route

INVERSE INVESTMENTS, LLC
3004 W. ELM STREET, MCHENRY, IL
INV 05-2300-0572

COC	Location	Direction of Point of Concern	Soil Concentration (mg/kg)	ρ_s [illegible]	θ_{ws} [illegible]	θas (Lair/Lsoil)	θT (Lair/Lsoil)	ρ_w [illegible]	w (gwater/gsoil)	ks (cm^3 water/gsoil)	Koc (L/kg)	foc (g/g)	Ugw (cm/yr)	K (cm/d)	i (cm/cm)	δ_{gw} [illegible]	I (cm/yr)	W (cm)	H'	LFsw (mg/Lwater)/(mg/kgsoil)	Gwsource (mg/L)
Tetrachloroethylene	BH-1B	SW - downgradient	240	1.5	0.15	0.28	0.43	1	0.1	0.93	155	0.006	4.98E+01	9.36E+00	0.0146	200	30	3779.52	0.754	0.785150473	188.4381139
					0	0		1		0			0.00E+00			200	30			#DIV/0!	#DIV/0!
					0	0		1		0			0.00E+00			200	30			#DIV/0!	#DIV/0!
					0	0		1		0			0.00E+00			200	30			#DIV/0!	#DIV/0!
					0	0		1		0			0.00E+00			200	30			#DIV/0!	#DIV/0!
					0	0		1		0			0.00E+00			200	30			#DIV/0!	#DIV/0!

INPUT PARAMETERS:

Symbol	Units	Explanation	Source	Equation (If Applicable)
ρs	g/cm^3	Soil Bulk Density	35 IAC Part 742, Appendix C, Table D or site-specific field measurement	
θws	cm^3water/cm^3soil	Volumetric Water Content in Vadose Zone Soils	35 IAC Part 742, Appendix C, Table D, Equation R22 or defaults	θws = (w*ρs)/...
θas	cm^3air/cm^3soil	Volumetric Air Content in Vadose Zone Soils	35 IAC Part 742, Appendix C, Table D, Equation R21 or defaults	θas = θT - (w*ρs)/...
θT	cm^3pore/cm^3	Total Soil Porosity	35 IAC Part 742, Appendix C, Table D, Equation R21 or defaults	θT = θas + θws
ρw	g/cm^3	Water Density	35 IAC Part 742, Appendix C, Table C	
w	gwater/gsoil	Average Soil Moisture Content	35 IAC Part 742, Appendix C, Table D, or site-specific field measurement	
ks	cm^3water/gsoil	Soil Water Sorption Coefficient	35 IAC Part 742 Appendix C, Table C, Equation R20	ks=Koc*foc
Koc	L/kg	Organic Carbon Partition Coefficient	35 IAC Part 742, Appendix C, Table E or I, Chemical-Specific	
foc	g/g	Organic Carbon Content of Soil	35 IAC Part 742, Appendix C, Table B, or site-specific field measurement	
Ugw	cm/yr	Groundwater Darcy Velocity	35 IAC Part 742, Appendix C, Table C, Equation R24	Ugw = K*i*365
K	cm/d	Aquifer Hydraulic Conductivity	Site-Specific Field Measurement	
i	cm/cm	Hydraulic Gradient	Site-Specific Field Measurement	
δgw	cm	Groundwater Mixing Zone Thickness	35 IAC Part 742, Appendix C, Table D	
I	cm/yr	Infiltration Rate	35 IAC Part 742, Appendix C, Table D	
W	cm	Width of Source Area Parallel to Wind or Groundwater Movement	Site-Specific Field Measurement	
H'	unitless	Henry's Law Constant	35 IAC Part 742, Appendix C, Table E, Chemical-Specific	

EQUATION R12:
Tier 2 SRO = Gwsource/LFsw

EQUATION R14:
LFsw = [illegible]

RBCA EQUATION R15 FOR THE SOIL COMPONENT OF THE GROUNDWATER INGESTION EXPOSURE ROUTE

Dissolved Concentration Along the Centerline of the Plume in the direction of the Nearest Point of Concern

INVERSE INVESTMENTS LLC
3004 W. ELM STREET, MCHENRY, IL
INV 05-2300-0572

COC	Location	Direction of Point of Concern	Csource (mg/L)	X (cm)	σx (cm)	σy (cm)	σz (cm)	λ (1/day)	K (cm/d)	I (cm/cm)	θT (cm^3/cm^3 soil)	U (cm/d)	Sw (cm)	Sd (cm)	Error Term 1	Error Term 2	erf1	erf2	C(x) (mg/L)	Tier 1 GRO (mg/L)
Tetrachloroethylene	BH-18	SW - downgradient	188.43811	5550	555	185	27.75	0.00096	9.35	0.0146	0.43	0.31746512	2804.18	200	0.69184761	0.25481325	0.672134	0.281422	0.00492839	0.005
Trichloroethylene					0	0	0					#DIV/0!							#DIV/0!	
Tetrachloroethylene					0	0	0					#DIV/0!							#DIV/0!	
Trichloroethylene					0	0	0					#DIV/0!							#DIV/0!	
cis-1,2-Dichloroethylene					0	0	0					#DIV/0!							#DIV/0!	
cis-1,2-Dichloroethylene					0	0	0					#DIV/0!							#DIV/0!	

INPUT PARAMETERS:

Symbol	Units	Explanation	Source	Equation (If Applicable)
Csource	mg/L	COC groundwater concentration at the source.	Equation R12/R14 Results	
X	cm	Distance along the centerline of the groundwater plume from the source to the point of compliance.	Site-specific Measurement	
σx	cm	Longitudinal Dispersivity	35 IAC Part 742, Appendix C, Table C, Equation R16	R16: σx = 0.10*X
σy	cm	Transverse Dispersivity	35 IAC Part 742, Appendix C, Table C, Equation R17	R17: σy = σx/3
σz	cm	Vertical Dispersivity	35 IAC Part 742, Appendix C, Table C, Equation R18	R18: σz = σx/20
λ	1/day	First Order Degradation Constant	35 IAC Part 742, Appendix C, Table E: Chemical-Specific	
K	cm/day	Hydraulic Conductivity	Site-specific Field Measurement	
I	cm/cm	Hydraulic Gradient	Site-specific Field Measurement	
θT	cm^3/cm^3 soil	Total Soil Porosity	Site-specific Field Measurement, or Default Value given in 35 IAC Part 742, Appendix C, Table B	
U	cm/day	Specific Discharge	35 IAC Part 742, Appendix C, Table C, Equation R19	R19: U = (K*I)/θT
Sw	cm	Source Width Perpendicular to Groundwater Flow Direction in the Horizontal Plane	Site-specific Field Measurement	
Sd	cm	Source Width Perpendicular to Groundwater Flow Direction in the Vertical Plane	Site-specific Field Measurement or defaults	
erf1	unitless	Mathematical Error Function	35 IAC Part 742, Appendix C, Table G	
erf2	unitless	Mathematical Error Function	35 IAC Part 742, Appendix C, Table G	

EQUATION R15:

C(x)=Csource*{exp((X/2σx)*(1-(1+(4λ*σx/U))^0.5)*erf1((Sw/(4*(σy*X)^0.5))*erf2(Sd/(2*σz*X))}

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REVISION DATE: 00/00/00	

ESTIMATED EXTENT OF GROUNDWATER EXCEEDING CLASS I REMEDIAL OBJECTIVES

3004 WEST ELM STREET
McHENRY, ILLINOIS

PROJECT NUMBER: INV 05-2300-0572 | FIGURE 1

D

EXHIBIT D

Northern Environmental Technologies, Inc.
Summary of
Groundwater Analytical Results
March 2009 – May 2012

Table 3
Groundwater Analytical Results - Detected VOCs
Inverse Investement, LLC
3004 West Elm, McHenry, IL

TIER 1 GROUNDWATER REMEDIATION OBJECTIVES		Compounds of Concern (mg/L)					
		1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethylene	Tetrachloroethene	Trichloroethene	Vinyl Chloride
Class I Groundwater		0.007	0.07	0.1	0.005	0.005	0.002
Class II Groundwater		0.035	0.2	0.5	0.025	0.025	0.01
Monitoring Well ID	Date						
MW-1	1/19/2006	<0.0010	<0.0010	--	<0.0010	<0.0010	<0.0010
	11/14/2006	<0.002	<0.002	--	<0.002	<0.002	<0.002
	3/9/2009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002
	8/6/2009	ND	ND	ND	ND	ND	ND
	11/19/2009	<0.1	<0.001	<0.001	0.0042	0.0013	<0.001
	3/11/2010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	7/21/2010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	11/17/2010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	8/2/2011	<0.001	<0.001	<0.001	0.0028	<0.0005	<0.0005
	11/15/2011	<0.001	<0.001	<0.001	0.0067	0.007	<0.0005
	5/2/2012	<0.001	<0.001	<0.001	0.023	0.0048	0.39
MW-2	3/9/2009	0.015	3.8E	0.078	0.11	0.03	1.4E
	8/6/2009	ND	8.6	0.053	0.098	0.019	1.7
	11/19/2009	<0.02	4.4	0.054	0.046	<0.02	1.1
	3/11/2010	<0.001	0.3	0.018	0.045	0.024	0.12
	7/21/2010	<0.001	0.25	0.011	0.019	0.013	0.19
	11/17/2010	<0.001	0.14	0.0067	0.017	0.004	0.23
	8/2/2011	<0.005	2.3	0.022	0.022	<0.0025	0.88
	11/15/2011	0.007	1.7	0.019	0.042	0.58	0.52
	5/2/2012	<0.005	1.3	0.013	0.023	0.0048	0.39
MW-3	1/19/2006	<0.0050	0.61	--	3	0.61	0.0076
	8/6/2009	ND	1.5	ND	5.7	1.6	ND
	11/19/2009	<0.02	1.1	<0.02	5.6	1.6	<0.02
	3/11/2010	<0.02	1	<0.02	5.3	1.2	<0.02
	7/21/2010	<0.010	1.1	<0.01	5.6	1.1	<0.01
	11/17/2010	<0.010	1.6	<0.01	5.3	1.2	<0.01
	8/2/2011	<0.020	1	<0.020	12	1.2	<0.010
	11/15/2011	<0.020	1.4	<0.020	11	0.98	0.015
	5/2/2012	<0.01	0.66	<0.01	5.3	0.62	<0.01
MW-4	1/19/2006	<0.25	8	--	<0.25	<0.25	3.4
	11/14/2006	0.0183	9.53	--	0.954	0.772	5.28
	11/19/2009	<0.1	14	<0.1	0.23	<0.1	9
	3/11/2010	0.031	17	0.02	0.68	0.34	8.9
	7/21/2010		19		1.4	0.37	9.4
	3/11/2010	0.031	17	0.02	0.68	0.034	8.9
	7/21/2010		19		1.4	0.37	9.4
	11/17/2010	<0.1	14	<0.1	0.68	0.035	4.2
	8/2/2011	<0.020	9.8	0.022	2.4	0.63	2.4
	11/15/2011	0.032	13	0.028	6.3	1.8	2.9
	5/2/2012	0.031	15	1.4	4.2	1.4	2.5
MW-5	3/9/2009	0.0074	2.7	0.066	4	0.86	0.17
	8/6/2009	ND	2.7	0.067	0.32	0.06	0.53
	7/21/2010	0.0016	0.96	0.035	0.12	0.21	0.47
	11/17/2010	<0.005	0.99	0.041	0.082	0.019	0.52
	8/2/2011	<0.001	0.75	0.013	0.46	0.079	0.1
	1/19/2006	<0.0010	0.023	--	0.002	0.011	<0.0010
	8/2/2011	<0.001	0.75	0.013	0.46	0.079	0.1
	11/15/2011	0.023	1.1	0.017	0.42	0.092	0.083
	5/2/2012	0.0027	0.78	0.14	1.3	0.14	0.13
MW-6	1/19/2006	<0.0010	0.023	--	0.002	0.011	<0.0010
	8/6/2009	ND	ND	ND	ND	ND	ND
	11/19/2009	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	11/17/2010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	8/2/2011	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.0005
	11/15/2011	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.0005
	5/2/2012	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.0005
MW-7	1/19/2006	<0.0010	0.01	--	0.011	0.25	<0.0010
	3/9/2009	<0.005	0.0097	<0.005	<0.005	<0.005	0.0031
	8/6/2009	ND	0.0074	ND	ND	ND	0.003
	11/19/2009	<0.001	<0.001	<0.001	0.0014	<0.001	<0.001
	3/11/2010	<0.001	0.0075	<0.001	0.0024	<0.001	0.0016
	7/21/2010	<0.001	0.0083	<0.001	0.0024	<0.001	0.0016
	11/17/2010	<0.001	0.0045	<0.001	<0.001	<0.001	<0.001
	8/2/2011	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.0005
	11/15/2011	<0.001	0.0039	<0.001	0.0022	<0.0005	0.00075
	5/2/2012	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.0005

Notes:
1) mg/L = milligrams per liter
2) GRO = Groundwater Remediation Objective
3) Bold = Analytical result exceeds the bolded Tier 1 GRO
4) ND, BDL or <0.002 = Concentration was not detected above the laboratory detection limit